3:13-cv-02159-CMC Date Filed 08/09/13 Entry Number 1-1 Page 1 of 71

# **EXHIBIT A**

STATE C	OF SOUTH CAROLINA	)		
			IN THE C	COURT OF COMMON PLEAS
COUNTY	OF RICHLAND	)		
		)		
East Rich	land County Public Service District,	)	CIVII	L ACTION COVERSHEET
	Plaintiff(s	))		
			_	2013 - CP - 40 - 3791
	vs.	<b>b</b>		
	ater technologies Corp., a/k/a Siemens Inc., Siemens, AG, Envirex, Inc. d.b.a.			<b>7913</b> J
	Envirex Products,	)		JUN 28
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ĺ	Defendant(s	))		2997 🕹
(Please Prin	t)		SC Bar #:	2997
	By: E. Russell Jeter		Telephone #:	803-765-0600 W
Address:	Jeter and Williams, P. A.		Fax #:	803-765-0619
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	Columbia, SC 29202		E-mail:	ejeter@jeterandwilliams.com
<u> </u>	Scott A. Elliott		SC Bar #:	1872
	Elliott & Elliott, P.A.		Telephone #:	803-771-0555
	1508 Lady Street		Fax #:	803-771-8010
i	Columbia, SC 29201		other:	
			E-mail:	selliott@elliottlaw.us
required by la	over sheet and information contained herein neither rep w. This form is required for the use of the Clerk of Cou of this cover sheet must be served on the defendant(s) a	irt for	the purpose of docke	ting. It must be filled out completely signed and
1	DOCKETING INFORM	AATI	ON (Check all th	at annly)
!	*If Action is Judgmen			
X JUE	RY TRIAL demanded in complaint. NON	- IIIP'	Y TRIAL demand	ed in complaint
	e is subject to ARBITRATION pursuant to the Cir	reuit C	Court Alternative D	ou in complaint. Dispute Resolution Rules
X This case	e is subject to MEDIATION pursuant to the Circu	it Cou	rt Alternative Disn	ute Resolution Rules
☐ This cas	e is exempt from ADR (certificate attached).			

SCCA / 234 (4/06)

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Contracts	Torts - Professional Malpractice	Torts - Personal Injury	Real Property
Constructions	Dental Malpractice		
Debt Collection	☐ Legal Malpractice	Assault/Slander/Libel	Claim & Delivery
Employment (120)	☐ Medical Malpractice	Conversion (310)	Condemnation (410)
General (130)	Notice/ File Med	Motor Vehicle	- roreciosure (420)
Breach of Contract	☐ Other (299)	Premises Liability Products Liability (340)	Pertition (440)
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Other (199)		Personal Injury (350)	Possession (450)
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		-	Other (499)
Inmate Petitions	Judgments/Settlements	Administrative Law/Relief	Appeals
PCR (500)	Death Settlement		<del></del>
Sexual Predator		Reinstate Driver's	Arbitration (900)
Mandamus (520)	Foreign Judgment Magistrate's	uudiciai keview (X/O)	Magistrate-Civil (910)
Habeas Corpus	Minor Settlement	Kener (azv)	Magistrate-Criminal
Other (599)	Transcript Judgment	Permanent Injunction	Municipal (930)
- CALLET (2277)	Lis Pendens (750)	Forfeiture (840)	Probate Court (940)
	Other (799)	Other (899)	☐ SCDOT (950) `
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Special/Co.	mplex /Other		Administrative Law Judge (980)
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			Commission (990)
Environmental (600)	Pharmaceuticals (630)		Employment Security Comm (991
Automobile Arb. (610)	-   -   -   -   -   -   -   -   -   -		□ Other (999)
Medical (620)	Out-of State Depositions (650)		
Other (699)			
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Submitting Party Sign	nature: Kunul A	tu Date:	Jun 18,2013
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Frivolous Civil Proceedings	Sanctions Act, S.C. Code Ann.	ons pursuant to SCRCP, Rule 11, 815-36-10 et seo	and the South Carolina

SCCA / 234 (4/06)

# FOR MANDATED ADR COUNTIES ONLY

\*\* Contact Respective County Clerk of Court for modified ADR Program Rules

SUPREME COURT RULES REQUIRE THE SUBMISSION OF ALL CIVIL CASES TO AN ALTERNATIVE DISPUTE RESOLUTION PROCESS, UNLESS OTHERWISE EXEMPT.

# You are required to take the following action(s):

- 1. The parties shall select a neutral within 210 days of filing of this action, and the Plaintiff shall file a "Stipulation of Neutral Selection" on or before the 224 day after the filing of the action. If the parties cannot agree upon the selection of the neutral within 210 days, the Plaintiff shall notify the Court by filing a written "Request for the Appointment of a Neutral" on or before the 224 day after the filing of this action. The Court shall then appoint a neutral from the Court-approved mediator/arbitrator list.
- 2. The initial ADR conference must be held within 300 days after the filing of the action.
- 3. Case are exempt from ADR only upon the following grounds:
  - a. Special proceeding, or actions seeking extraordinary relief such as mandamus, habeas corpus, or prohibition
  - b. Cases which are appellate in nature such as appeals or writs of certiorari;
  - Post Conviction relief matters;
  - d. Contempt of Court proceedings;
  - e. Forfeiture proceedings brought by the State;
  - f. Cases involving mortgage foreclosures; and
  - g. Cases that have been submitted to mediation with a certified mediator prior to the filing of this action.
- 4. Motion of a party to be exempt from payment of neutral fees due to indigency should be filed with the Court within ten (10) days after the ADR conference had been concluded.

Please Note: You must comply with the Supreme Court Rules regarding ADR. Failure to do so may affect your case or may result in sanctions.

STATE OF SOUTH CAROLINA

COUNTY OF RICHLAND

IN THE COURT OF COMMON PLEAS C/A No. 2013-CP-40
East Richland County Public
Service District,

Plaintiff

vs.

Siemens Water Technologies Corp., a/k/a Siemens Industry,Inc., Siemens AG, Envirex, Inc. d.b.a.

USFilter's Envirex Products,

Defendants.

# TO THE DEFENDANTS ABOVE NAMED:

YOU ARE HEREBY SUMMONED and required to answer the Complaint in this action, a copy of which is herewith served upon you, and to serve a copy of your Answer to the said Complaint upon the subscriber, at Jeter and Williams, P. A., 1204 Main Street, Suite 200 (29201), Post Office Box 7425, Columbia, South Carolina 29202, within thirty (30) days after the service hereof, exclusive of the day of such service; and if you fail to answer the Complaint in the time aforesaid, a judgment by default will be rendered against you for the relief demanded in the Complaint.

JETER & WILLIAMS, P. A.

Edwin Russell Jeter/S. C. Bar # 299

1204 Main Street, Suite 200 (29201)

Post Office Box 7425

Columbia, SC 29202 Telephone: 803-765-0600 Facsimile: 803-765-0619

E-mail: ejeter@jeterandwilliams.com

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Scott A. Elliott 1508 Lady Street Columbia, SC 29201 Telephone: 803-771-0555 E-mail: selliott@elliottlaw.us

Attorneys for the Plaintiff

June 28, 2013 Columbia, South Carolina

STATE OF SOUTH CAROLINA COUNTY OF RICHLAND	) )	IN THE COURT OF COMMON PLEAS C/A No. 2013-CP-40-
East Richland County Public Service District,  Plaintiff	) ) )	20
vs.  Siemens Water Technologies Corp., a/k/a Siemens Industry,Inc., Siemens AG, Envirex, Inc. d.b.a. USFilter's Envirex Products,  Defendants.	) ) ) ) ) ) )	COMPLAINT (JURY TRIAL DEMANDED)  PR  72:
	)	

The Plaintiff, East Richland County Public Service District, complaining of the Defendants, would allege and prove as follows:

- 1. The Plaintiff, East Richland County Public Service District ("East Richland"), is a special service district created by the General Assembly for the purpose of providing safe and reliable disposal of sewage in Northeast Richland County. East Richland is a public, non-profit political subdivision with the power to enter into contracts and pursue litigation as necessary.
- 2. The Defendant Siemens Water Technologies Corp. upon information and belief has merged into Siemens Industry, Inc., as of 2011, which is a subsidiary of Siemens AG, with its principal place of business in a state other than South Carolina. It has done business in Richland County in the State of South Carolina in connection with East Richland as alleged herein.
- 3. The Defendant Siemens AG is upon information and belief the parent company of the other Defendants, and is incorporated in a state or country other than South Carolina. It has done business in the State of South Carolina, and upon information and belief continues to do business

in this State..

- The Defendant Envirex, Inc. d.b.a. USFilter's Envirex Products . is upon information and belief, a brand acquired by Siemens Industry, Inc., with its principal place of business in a state other than South Carolina. It has done business in Richland County in the State of South Carolina in connection with East Richland as alleged herein.
- 5. The three Defendants are referred to collectively as "Siemens" in this Complaint.
- East Richland collects and treats sewage in the northeastern portion of the County of 6. Richland, State of South Carolina. Its service area includes the Towns of Forest Acres and Arcadia Lakes, and various unincorporated areas of northeastern Richland County.
- Because the sewage East Richland treats is primarily residential and commercial, the influent going into its treatment plant is within a normal range for influent characteristics.
- 8. East Richland operates a treatment plant known as the Gills Creek Waste Water Treatment Plant ("Gills Creek Plant") which is located near the location where Gills Creek enters the Congaree River.
- 9. East Richland has been subject to an effluent phosphorous limit during all times relevant to this Complaint. This limit is a matter of public record and was therefore available to Siemens, and if Siemens inquired of East Richland, it would have been immediately disclosed to Siemens.
- 10. At 9 million gallons a day of flow (9 mgd), the current plant level, the treatment process naturally removes about 150 pounds a day of phosphorous, or about 1.65 mg/l, from the East Richland influent without any special treatment.
- 11. The phosphorous limit, based on current plant flow, is 2 mg/l based on content, or 105 pounds a day (lbs/day) based upon mass. Thus under normal circumstances, the natural processes of treatment would remove more than enough phosphorous to meet the concentration

been averaging substantially fewer pounds per day in its effluent.

- 12. To remove phosphorous beyond that removed by natural processes, alum is added to the wastewater which aids with the absorption of the phosphorous. Over the five year period since 2007, East Richland has rarely added alum to its wastewater. The amount of alum added since 2007 is an immaterial amount for purposes of treating the wastewater.
- 13. Around 2003, East Richland decided to update the Gills Creek Plant and increase its capacity to 16 mgd. During construction of the plant, the compost system ceased working and East Richland had to decide how to handle the sludge produced by the plant. East Richland's engineer and plant operator had heard of a new process called the cannibal system which was represented to greatly reduce the amount of sludge wasted to the landfill. They contacted Siemens to explore whether it was a suitable alternative for the plant in terms of performance and cost.
- 14. East Richland was operating the Gills Creek Plant using a conventional treatment system. The by-product of a conventional system is sludge that has to be disposed of by some method. The cannibal process is an attempt to decrease the amount of waste solids, which thereby reduces the cost of disposing of sludge.
- 15. Siemens provided East Richland with preliminary information about the cannibal system and how it would reduce costs. Siemens represented that the cannibal system was a "revolutionary technology." According to Siemens, while each plant required a custom process design, the process could easily be retrofitted into existing plants to reduce the amount of biological solids wasted and the operating costs. Siemens stated the system would cut operating costs by reducing or eliminating the need for sludge hauling and disposal costs, and cutting down

- on the energy expense to run the aeration equipment, among others. The principal savings would result from wasting less sludge to the landfill. Siemens stated once it obtained a "thorough understanding of your facility, the operation, and the waste characteristics," it would provide a design and budgetary estimate for the customer.
- 16. By early May, 2004, Siemens had sent preliminary equipment lists and flow diagrams, cost data, and savings comparisons to East Richland. They also sent a detailed questionnaire covering influent/effluent conditions, plant conditions, operating costs, solids disposal data, and other issues. In mid-May, 2004, Siemens provided preliminary projected cost savings for the Gills Creek Plant, with most of the savings (\$465,704) coming in sludge handling. Siemens represented to East Richland that the amount of sludge that would be wasted would be 0.1 lbs/lb of BOD or less.
- During the Siemens sales presentation, representatives of East Richland traveled to an operating plant in Byron, Illinois. This plant handled 336,000 gallons a day. Siemens represented that sludge wasting had been reduced substantially and that the plant was operating satisfactorily. Siemens provided performance and cost data based upon several years of operation. Once again, the data provided by Siemens represented that the ratio of sludge waster per pound of BOD would be 0.1 or less.
- 18. By early September, 2004, Siemens represented that all equipment, permitting, engineering, construction, start-up and training could be provided for a guaranteed not to exceed price of \$3,198,000.
- 19. In late October, 2004, Siemens provided East Richland its detailed proposal for the system. This proposal included a performance warranty: "USFilter, Envirex Products, will provide a one (1) -year guarantee that the amount of sludge wasted (not including screenings and

grit) will not exceed 0.1 pounds per pound of influent BOD."

- 20. The cannibal system was new and "revolutionary," and was proprietary to Siemens. There were a number of unknowns to East Richland in using the cannibal system. The only operating plant East Richland had seen was a small plant. In order to mitigate the risk to East Richland, Siemens was willing to enter into a performance warranty guaranteeing results. The performance standard in the warranty was that the amount of sludge that would be wasted would be 0.1 lbs. per lb. BOD. If the performance standard could not be met, there would be payments due to East Richland for Siemens' failure to achieve the promised savings. At no time however, did Siemens present, nor did East Richland consider, the risk of deception or cover-up on the part of Siemens, as being covered by or subject to the terms of the performance warranty.
- 21. In November, 2004, East Richland's engineer sent Siemens, at their request, at least two years of data from December, 2002 to October, 2004, showing the total phosphorous in the influent and effluent of the Gills Creek Plant. This data showed the historic average phosphorous level of the influent was 2.8 mg/l. The historic average phosphorous level in the effluent was 1.2 mg/l. Thus, the plant was meeting its phosphorous limit through the natural removal of phosphorous. East Richland understood from its own experience that there would be no need to use alum more than rarely to meet the limit, and Siemens never stated that understanding was incorrect prior to the parties entering the contract.
- 22. After reaching the promised "thorough understanding of your facility, the operation, and the waste characteristics," in December, 2004, Siemens sent East Richland the last pre-contract representation concerning expected savings from using the cannibal system. Siemens represented the savings would amount to over \$600,000 a year, with most of that coming from sludge handling. Thus, over three years the expected savings would be over \$1.8 million.

- 23. On December 21, 2004, Siemens sent East Richland its revised proposal. For the first time, Siemens raised the issue of phosphorous limits. For the prior seven months, Siemens had consistently represented its system would meet the 0.1 standard at the Gills Creek Plant. In this proposal, Siemens repeated that warranty, although with a new title: "Warranty Assuming the Treatment Plant Does Not have an Effluent Phosphorous Limit: Annual yield 0.1 biosolids\* removed/lb CBOD removed, where influent wastewater TSS/BOD is not to exceed 1.0." However, Siemens added alternate warranty language which it had never discussed with East Richland: "Alternate Warranty should the Treatment Plant have an Effluent Phosphorous Limit: Annual yield 0.28 biosolids\* removed/lb CBOD removed, where influent wastewater TSS/BOD is not to exceed 1.0."
- 24. The language referenced by the \*, stated: "... In the event that the plant has an effluent phosphorous limit, chemicals will need to be added to precipitate and remove phosphorous and extra biosolids will need to be wasted from the plant to remove the chemical phosphorous solids—under these conditions, the alternate warranty would apply and biosolids would include the chemical-phosphorous solids."
- 25. Based upon the representations of Siemens, East Richland reasonably understood that the alternate warranty would not apply to it since the conditions triggering the alternate warranty in the \* language, the use of chemicals to remove phosphorous, did not apply to East Richland. Siemens knew East Richland's history of small phosphorous amounts in its influent and effluent, and knew or should have known of East Richland's effluent phosphorous limits. Yet, Siemens, never indicated to East Richland that it considered East Richland would be under the alternate language. East Richland reasonably understood that Siemens was agreeing it would meet the 0.1 standard at East Richland, as had been the understanding for the previous seven months.

- 26. Siemens executed and sent the performance warranty to East Richland on March 23, 2005. However, William Long, East Richland's Executive Director did not sign or return the performance warranty immediately. He executed the performance warranty on June 15, 2007. A copy is attached hereto as Exhibit A.
- 27. On or about March 31, 2005, Siemens representatives attended a meeting with East Richland to explain the system to East Richland's Board and personnel. In a follow-up letter to that meeting, Siemens represented to East Richland that using cannibal would result in "an up to 90% reduction in biological solids disposal." The reference to a 90% reduction represented that the 0.1 standard would apply to East Richland, and was so understood by East Richland.
- 28. Based upon this understanding, East Richland began to issue work orders in May, 2005, for the necessary equipment and related items to construct the cannibal system. The total cost of the work was estimated to be \$3,198,000.
- 29. After the work was complete and the Gills Creek Plant started operating with the cannibal system, it took time to stabilize the operation but by July, 2007, Siemens reported the plant was operating steadily.
- 30. Under the terms of the performance warranty, Siemens had a three year period to reach its performance goal, before large lump sum payment would be due. Meeting its performance standard after the first year would satisfy the warranty and discharge Siemens from any further performance obligation. If Siemens did not reach its goal after the first year, it would have a second year in which to meet the standard, and then a third year, if necessary. However, each year Siemens failed to meet the performance standard Siemens would owe agreed payments to East Richland. If at the end of three years, Siemens had not met its warranty obligations, it would owe East Richland a further lump sum amount.

- 31. Siemens wrote East Richland that final start-up of process operations and equipment was completed on July 12, 2007, and therefore, "the Performance Warranty Test Period will begin on that date." The warranty testing period would end on July 12, 2010, unless successful results were achieved at an earlier date.
- 32. East Richland sent samples and data to Siemens on a regular basis.
- On December 1, 2008, Siemens reported to East Richland that since July 2007, Gills Creek's cannibal system had reached a treated value of 0.28. Although the letter noted that result "is right on track" for the expected result where a plant has an effluent phosphorous limit, it stopped short of declaring that it had met the warranty provision and that the warranty had been satisfied. Siemens also acknowledged that this result had been met without adding chemicals to remove phosphorous. Then, Siemens told East Richland for the first time that as the amount of sludge wasted dropped, the relative lack of sludge to absorb phosphorous would mean that chemicals would have to be added in order to meet the effluent standard. That statement, which meant that Siemens considered the 0.28 standard applied to East Richland, instead of the 0.1 standard, came almost four years after issuance of the first work orders to Siemens for the cannibal system, based upon the understanding that the 0.1 standard applied.
- 34. However, instead of declaring the warranty period ended because of the 0.28 result, Siemens stated in the same letter, "We will continue to work with the plant to improve Cannibal performance, but at some point, that improvement will come at the cost of adding chemical to remove phosphorous."
- 35. There was no reason for East Richland to question the 0.28 test results. Siemens was a leader in its field with an excellent reputation. The results were being reported by professional engineers and lab personnel whose integrity was not in doubt. The Siemens personnel were

experts in the new field that cannibal represented. This result was for the first year, and there were no other years' data which would cast any doubts upon the results. The results from a new technology, which were within the stated range of possible outcomes, was the type of data upon which East Richland's engineer and personnel would normally and reasonably rely. The issue which the parties were focused upon was whether the 0.1 standard applied, which had still not been met, or whether the 0.28 standard applied which Siemens reported had been met the first year.

- 36. The efforts to improve the cannibal performance continued for months. While Siemens was working with East Richland on a regular basis, their efforts were proving unsuccessful. On August 26, 2009, William Long wrote Siemens reminding them of their performance warranty obligations to reach the 0.1 standard, and while expressing gratitude for their efforts, stated that due to the failure to meet the 0.1 benchmark, it was now necessary to have a meeting to discuss the cannibal operations at the Gills Creek Plant.
- 37. Siemens responded on September 14, 2009, claiming for the first time that Siemens had achieved the 0.28 benchmark, and that the performance warranty period had ended on July 12, 2008. The 0.28 results were based on its calculations from the raw data provided by East Richland. However, Siemens did say it was continuing "to support the plant staff to optimize and improve the process...."
- 38. On January 20, 2010, the parties met to discuss their issues and try to map out a way forward. Siemens reported its yield for the last year, 2009, was 0.32. The parties agreed they would extend the time for resolving problems, in light of the acknowledged failure of the cannibal system to perform as intended (under either standard) during year two. They agreed to extend the testing period in an effort to resolve the problems. As a result of this meeting,

Siemens agreed to provide suggested operations and optimizations going forward. The parties agreed that the optimization period would run for one year once normal operations were restored after a period of abnormally high flows. East Richland would take samples and generate the performance warranty data sheets on a monthly basis and send them to Siemens. The bi-weekly conference calls would be re-started. Siemens agreed to provide its services at no charge, and East Richland understood that the performance warranty period was being extended to allow for the extended testing.

- 39. In March, 2010, Siemens issued a Seasonal Operations Plan for the Gills Creek Plant that sought to improve performance by recommending different modes of operation for the seasonal variations in influent flow and solids production.
- 40. By mid-2011, East Richland could tell from its data that little progress was being made. Siemens claimed that the lack of performance was due to East Richland's staff and procedures. To resolve this issue, in 2011, Siemens and East Richland agreed to allow Siemens to direct the detailed operations of the plant for one year and Siemens would provide these services free of charge. It was understood by East Richland that the performance testing period would be extended from June, 2011 until June, 2012, while Siemens was in control of plant procedures. East Richland followed the instructions of Siemens but its data showed the results still did not improve. In 2012, East Richland decided to stop operating the cannibal system due to the lack of performance by Siemens.
- For the four quarters before Siemens took over control of the plant, East Richland now calculates the average yield was 0.54. In the four quarters that Siemens controlled the operations, East Richland calculates the results were once again 0.54. In the three quarters since East Richland stopped operating cannibal, East Richland calculates the average yield has been

- 0.53. It is now apparent that cannibal did not provide materially better solids yields than were produced when operating without the cannibal system.
- 42. Siemens had reported in its letter of December 1, 2008, that it had achieved a 0.28 result during the first year of performance warranty testing. However in 2013, given how the results without cannibal compared to the results with cannibal, East Richland researched its data. According to calculations based on the data that East Richland is informed and believes was provided to Siemens during the performance testing period, the actual yield in the first year of warranty testing was not 0.28 but was in fact at least 0.35 lbs (or more) of solids removed/lb of CBOD removed. That result is more than 25% in excess of the warranty limit of 0.28.
- Upon information and belief: Siemens covered-up that it failed to meet the 0.28 standard in the first year, and it covered up that it failed to meet its performance warranty standard during the performance warranty testing periods; Siemens failed to report the 0.35 results despite having the data in its possession that had been furnished to it by East Richland which showed results of 0.35 or more; and, Siemens issued this false report intending that East Richland would conclude that Siemens had met the 0.28 standard of the performance warranty and would not pursue its right to payments under the performance warranty.
- East Richland relied upon the results reported by Siemens in that had it known the true results: East Richland would have aggressively pursued its warranty rights instead of forbearing out of concern that Siemens may have actually met the applicable standard; and East Richland would have filed suit over the warranty violations at the end of the three year period.
- 45. From December 1, 2008, until May, 2013, East Richland did not know that Siemens failed to satisfy any of its warranty requirements, including the 0.28 standard, during the first year of the performance testing period, or later. As a result, East Richland waited from

December, 2008 on, before filing suit.

- 46. As stated earlier, East Richland had no reason to believe the 0.28 report was wrong. The 0.28 result was for the first year, and when the results did start to worsen, Siemens blamed East Richland and the seasonal fluctuations due to the climate for the poor performance. It was not until 2013 that East Richland had reasons to question the reported 0.28 result.
- 47. East Richland has brought this action within three years of Siemens' failure to meet the 0.1 performance warranty by July 12, 2010.
- 48. East Richland has brought this action within weeks of learning of Siemens' failure to meet the 0.28 performance warranty by July 12, 2010.
- 49. East Richland was prejudiced by Siemens' concealment of its failure to meet the warranty standard, in that it accepted the 0.28 results as being true and did not seek interim penalty payments, and did not file suit against Siemens for its violation of the 0.28 standard, until now.
- 50. Upon information and belief, Siemens sold other public entities, i.e. municipalities.

  Cannibal systems that did not work. East Richland is informed and believes that the Town of Summerville has shut down its cannibal system after disappointing results that differed from those promised, although Siemens falsely told East Richland the system was doing fine and there were no problems. Upon information and belief, the Town of Holly Springs, North Carolina, has shut down its cannibal system and is facing financial distress as a result of the unacceptable results from the cannibal system. East Richland is informed and believes that there are numerous other utilities that relied on the Siemens warranty and have found that the system does not work as warranted.

FOR A FIRST CAUSE OF ACTION

- 51. East Richland re-alleges paragraphs 1 through 50 as fully as if set forth herein.
- 52. Siemens warranted to East Richland that its cannibal system would result in performance results as stated in the performance warranty.
- 53. The performance warranty provided for a three year performance warranty in which Siemens was to reach the benchmark performance.
- 54. The three year warranty period began on July 12, 2007.
- 55. Three years later, on July 12, 2010, Siemens had failed to meet either the 0.1 or the 0.28 performance benchmarks.
- 56. As a result of Siemens' failure to meet the performance warranty benchmark, and because its yield has exceeded 0.28 each year, and because said failure has extended beyond the three year period in the performance warranty's "Excess Biosolids Penalty Table," East Richland is entitled to the applicable payments shown in the Penalty Table of Exhibit A. Further, because the damages are a sum certain amount, East Richland asks for pre-judgment interest from the date of the breach.

#### FOR A SECOND CAUSE OF ACTION

- 57. East Richland re-alleges paragraphs 1 through 56 as fully as if set forth herein.
- 58. Siemens reported the first year performance test results as being 0.28 lbs of biosolids removed per lb of CBOD, which met the performance warranty requirement. Upon information and belief, Siemens concealed the actual results of the performance testing from East Richland. The actual results were 0.35 (or more) lbs of biosolids removed per lb of CBOD, which was 25% higher than warranted. This concealment by Siemens was, upon information and belief, dishonest in fact, constituted unfair dealing, or was an unlawful appropriation by design of East Richland's right to penalty damages.

- 59. Notwithstanding Siemens' report that it reached the 0.28 standard in the first year, Siemens failed to meet the 0.28 solids wasting ratio, in breach of its warranty.
- 60. Upon information and belief, the concealment of the actual results was intended to, and did mislead East Richland into believing Siemens had satisfied the warranty requirement, thereby covering-up the true performance in order to escape from liability for the poor performance of the cannibal system. This concealment of the actual results was separate and distinct from the breach of contract itself, but was still closely connected to the breach, and therefore the concealment is an actionable independent fraudulent act.
- 61. Upon information and belief Siemens acted with willful and fraudulent intent in reporting that the first year's performance was 0.28, in that Siemens knew that the actual results were materially higher than 0.28.
- 62. As a result of Siemens' concealment, East Richland did not seek interim or final payments for violation of the 0.28 standard, and did not file a legal action until the actual results were discovered.
- 63. The fraudulent acts and intent in connection with the breach of contract also violate the covenant of good faith and fair dealing inherent in each and every contract.
- 64. East Richland is informed and believes that it is entitled to recover punitive damages in addition to actual damages, as a result of the fraudulent acts and intent accompanying the breach of contract. Further, East Richland asks that it be awarded pre-judgment interest upon the actual damages from the date of the breach.

# FOR A THIRD CAUSE OF ACTION

- 65. East Richland re-alleges paragraphs 1 through 64 as fully as if set forth herein.
- 66. East Richland has suffered an ascertainable loss of money or property as a result of

purchasing and installing the cannibal system for \$3,198,000, and not achieving the savings upon which the purchase was represented and warranted to perform, some of which savings losses are represented by the applicable agreed payments. In addition, East Richland's excess sludge handling, power, and chemical costs for dealing with excess sludge wasting over and beyond that warranted by Siemens, constitute losses which are not compensated by the agreed payments in that: the losses from handling excess sludge include extra power and chemical costs during processing that are not covered by the calculation; the amount of excess sludge handling exceeds the maximum amounts used in calculating the agreed payments; and the excess sludge handling costs mean that, even with the agreed payments, the payback period for equipment costs will exceed the six years used in the payment calculation.

- 67. Upon information and belief, that loss of money was the result of the use or employment of an unfair or deceptive method, act or practice declared unlawful by S.C. Code Ann. §39-5-20, in that Siemens marketed and sold East Richland & unique and revolutionary system that did not work as warranted, which Siemens then intentionally or recklessly covered-up by concealing the true results in a manner designed and likely to mislead East Richland, thereby causing a substantial loss to East Richland, which was acting reasonably in believing that Siemens had met the 0.28 standard during the first year of testing.
- East Richland, as a public service district, represents the public interest in that it seeks to protect the interests of its sewer customers. Siemens' wrongful acts and omissions effect the public interest in that East Richland did not receive either the promised savings nor the performance warranty payments, despite the large sums spent on constructing and installing the system. In addition, East Richland is informed and believes that Siemens sold cannibal systems that did not work to other public utilities, and therefore the cover-up of cannibal's performance

failures is capable of repetition.

69. For the reasons specified above, these acts and omissions were willful and knowing violations of the Unfair Trade Practices Act, that entitle East Richland to recover actual damages which should be trebled by the Court, plus pre-judgment interest and attorney's fees.

## FOR A FOURTH CAUSE OF ACTION

- 70. East Richland re-alleges paragraphs 1 through 69, not inconsistent herewith, as fully as if set forth herein.
- 71. Further pleading in the alternative, this Court should use its equitable powers to reform the performance warranty to properly reflect the agreement of the parties.
- 72. The parties intended that the cannibal system would reduce wasting of sludge to the level of 0.1 lbs of biosolids removed per lb of BOD removed. Only if East Richland needed to add chemicals to precipitate and remove phosphorous, and extra biosolids had to be wasted to remove the chemical phosphorous solids, thereby materially changing the amount of biosolids removed, would the alternate warranty apply.
- 73. East Richland did not need to introduce chemicals to remove phosphorous in order to meet its effluent limits. It only rarely added alum to the liquor, and then, only in immaterially small amounts. Siemens repeatedly represented to East Richland that the 0.1 benchmark would apply.
- 74. If the performance warranty is held to state that the mere existence of a phosphorous effluent limit, standing alone, or along with the rare and immaterial use of alum, is sufficient to apply the alternate warranty based upon a yield of 0.28, then there has been a mutual mistake of the parties where a material term has been omitted which had been agreed to by the parties orally, or there has been a unilateral mistake by East Richland, procured by misrepresentations of

Siemens as to which benchmark would apply, without negligence on the part of East Richland.

Accordingly, good grounds exist for the Court to use its equitable powers to reform the performance warranty to accurately reflect the agreement of the parties or to correct a unilateral mistake procured by misrepresentation. Further, having reformed the contract terms, this court should then award damages as appropriate to reflect the parties' agreement, and award East Richland pre-judgment interest as allowed by law.

WHEREFORE, Plaintiff prays for judgment in its favor in the amount of its actual damages, treble damages as awarded by the Court, punitive damages, attorneys' fees, prejudgment interest, the costs of this action, and for such other and further relief as this Court may deem just and equitable.

JETER & WILLIAMS, P. A.

By: Calven fun

Edwin Russell Jeter/S. C. Par # 299

1204 Main Street, Suite 200 (29201)

Post Office Box 7425 Columbia, SC 29202 Telephone: 803-765-0600 Facsimile: 803-765-0619

E-mail: ejeter@jeterandwilliams.com

ELLIOTT & ELLIOTT, P.A.

Scott A. Elliott 1508 Lady Street Columbia, SC 29201 Telepinone: 803-771-0555 E-mail: selliott@elliottlaw.us

Attorneys for the Plaintiff

June <u>22</u>, 2013 Columbia, South Carolina

#### USFILTER'S ENVIREX PRODUCTS

# PROCESS PERFORMANCE WARRANTY for the CANNIBAL™ SOLIDS REDUCTION PROCESSES for East Richland County, SC - Gills Creek WWTP

This document and Appendices I-V hereto provides a process performance warranty ("Performance Warranty") by Envirex Inc. dba USFilter's Envirex Products (hereinafter referred to as MANUFACTURER) to East Richland County Public Service District, SC (hereinafter known as the OWNER) for the USFilter's Envirex Products Cannibal™ Solids Reduction Process (the "Cannibal Process") for the Gills Creek, SC Wastewater Treatment Plant (the "Facility").

Section 1 - Statement of Biosolids Production Warranty.

(a) Subject to each of the provisions of this Performance Warranty, including without limitation the conditions set forth in Section 1(b) hereof, MANUFACTURER warrants to the OWNER that, the Cannibal System shall not exceed the biosolids\* production as defined below.

Warranty Assuming the Treatment Plant Does Not have an Effluent Phosphorus Limit: Annual yield 0.1 lb biosolids\* removed/lb CBOD<sub>5</sub> removed, where influent wastewater TSS/BOD is not to exceed 1.0.

Alternate Warranty should the Treatment Plant have an Effluent Phosphorus Limit: Annual yield 0.28 lb biosolids\* removed/lb CBOD, removed, where influent wastewater TSS/BOD is not to exceed 1.0.

\*biosolids does not include trash material removed by screens or cyclones in the Cannibal System, or headworks screening or grit removal solids. The quantity of trash material is not a warranted parameter. In the event that the plant has an effluent phosphorus limit, chemicals will need to be added to precipitate and remove phosphorus and extra biosolids will need to be wasted from the plant to remove the chemical phosphorus solids – under these conditions, the alternate warranty would apply and "biosolids" would include the chemical-phosphorus solids.

(b) The Biosolids Production Warranty set forth in Section 1(a) hereof is expressly conditioned upon (i) the Cannibal Process being erected, started up, operated and maintained in accordance with MANUFACTURER's drawings, manuals and instructions, (ii) the influent wastewater for each calendar month of performance testing being within all of the characteristics defined in Appendix I, and (iii) OWNER's maintenance of adequate and accurate records regarding its compliance with each of the foregoing conditions as specified in Appendix V.

Section 2 - Compliance with Warranty.

(a) If at the conclusion of the Performance Warranty Test Period the biosolids production is



less than or equal to the warranted value set forth in Section 1(a) hereof, MANUFACTURER shall have fulfilled its obligations under this Performance Warranty and OWNER shall so confirm such fulfillment to MANUFACTURER in writing.

- (b) If during any monthly period of the Performance Warranty Testing Period, any monthly average influent wastewater characteristic is above the limits specified in Appendix I, then the biosolids yield guarantee may be increased accordingly.
- (c) If the plant experiences a process upset or mechanical problem beyond the MANUFACTURER's control or if the MANUFACTURER's operational instructions are not followed and such upsets or disturbances are the cause of a wasting event, then that quantity of waste biological solids will not be counted toward the annual biosolids yield.

# Section 3 - Non-Compliance with Warranty.

(a) Subject to compliance with the conditions set forth at Section 1(b) and the fulfillment by the parties of their respective obligations under this Performance Warranty, if at the conclusion of the Performance Warranty Testing Period the biosolids production does not meet the warranted value established in Section 1(a), the OWNER shall issue in writing to MANUFACTURER a Notice of Non-Compliance. Upon issuance of Notice of Non-Compliance, MANUFACTURER will provide a written performance evaluation of the Cannibal System, and may recommend operational changes to obtain compliance, upon which the OWNER shall at its expense initiate said operational changes within a reasonable period of time. If installation of additional equipment, or modifications to equipment, are required, then MANUFACTURER shall at its expense initiate said equipment changes within a reasonable period of time. MANUFACTURER shall also reimburse to OWNER a penalty, as outlined in the penalty table included herein

After implementation of any required operational changes or addition/modification of equipment, a second Performance Warranty Testing Period shall commence and be conducted in accordance with this Performance Warranty. If at the conclusion of the second Performance Warranty Test Period the biosolids production is less than or equal to the warranted value set forth in Section 1(a) hereof, MANUFACTURER shall have fulfilled its obligations under this Performance Warranty and OWNER shall so confirm such fulfillment to MANUFACTURER in writing.

(b) Subject to compliance with the conditions set forth at Section 1(b) and the fulfillment by the parties of their respective obligations under this Performance Warranty, if the Cannibal System has still not reached warranted performance at the conclusion of the second Performance Warranty Testing Period, and MANUFACTURER's obligations under this Performance Warranty have not otherwise been deemed satisfied pursuant to the terms hereof, the OWNER may declare MANUFACTURER to be in breach of this Performance Warranty by notifying MANUFACTURER promptly in writing of such breach. Upon receipt of such notification, MANUFACTURER shall pay to OWNER a penalty payment based on the second Performance Warranty Testing Period average biosolids yield per the schedule below:

# **Excess Biosolids Penalty Table**

	Busalus Cent Tee est Of Sambal 25 Necessary Cent Te Comment Action To researcy Physipherus Llinin			
0.10	0.28	NA	NA	NA
0.15	0.33	\$30,358	\$89,711	\$180,784
0.20	0.38	\$60,716	\$179,422	\$361,569
0.25	0.43	\$91,073	\$269,133	\$542,353
0.30	0.48	\$121,431	\$358,845	\$723,138

Note: The alternate biosolids yield would apply if chemicals are used to meet a phosphorus limit – in which case biosolids would include chemical-phosphorus solids. See Appendix IV for a summary of the penalty calculations.

(c) If at any time during the warranty period, MANUFACTURER personnel make a site visit as a follow-up to notices of non-compliance, and finds that written operational instructions given previously were not followed and are the cause of continued non-compliance, MANUFACTURER can invoice the OWNER for travel and living costs incurred at MANUFACTURER's then-current standard per diem field service rate.

It is expressly understood and agreed by the OWNER and MANUFACTURER that at all times during the Performance Warranty Testing Program and during the installation of additional equipment or other improvements to the OWNER'S facilities, the OWNER must maintain a wastewater meeting the effluent wastewater discharge requirements as specified herein. It is further agreed that all recommendations for operational changes, or for the provision and installation of additional equipment or for other improvements of the OWNER'S facilities shall consider effluent quality to be foremost in evaluation of the procedures and methods to implement these recommendations.

## Section 4 - Schedule and Testing.

The Process Performance Warranty Testing Program shall begin once the Cannibal Process has reached steady operation, and not more than 6 months from the date of Beneficial Use for the Cannibal Process, or more than 18 months following shipment of the equipment, whichever is sooner. Testing to determine fulfillment of this Performance Warranty shall be in accordance with the testing procedures set forth in Appendix II. All testing costs to monitor compliance and for process control shall be borne by the OWNER. This test data, along with documentation required under Section 1(b), shall be made available to MANUFACTURER on request; failure to make such information and data available within a reasonable period shall nullify the Performance Warranty. If the OWNER fails to commence, and diligently pursue, such testing procedures within the time periods established in Appendix II, the Performance Warranty shall be deemed to have been fulfilled and MANUFACTURER shall have no further liability to the OWNER hereunder.

# Section 5 - CERTAIN LIMITATIONS

- PAYMENT OF THE LIQUIDATED DAMAGES PURSUANT TO SECTION 3(b), AND FULFILLMENT BY MANUFACTURER OF ITS OBLIGATIONS UNDER SECTION 3(a), SHALL BE THE OWNER'S SOLE AND EXCLUSIVE REMEDY FOR ANY FAILURE BY MANUFACTURER TO SATISFY ANY REQUIREMENT OF THIS PERFORMANCE WARRANTY. EXCEPT FOR SUCH OBLIGATIONS, IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR ANY DAMAGES OF ANY NATURE WHATSOEVER FOR ANY BREACH OF THIS PERFORMANCE WARRANTY, INCLUDING WITHOUT LIMITATION ANY DIRECT, INDIRECT, CONSEQUENTIAL, INCIDENTAL, SPECIAL, PUNITIVE OR OTHER DAMAGES. MANUFACTURER'S TOTAL LIABILITY UNDER THIS PERFORMANCE WARRANTY, WHEN ADDED TO ALL LIABILITY OF MANUFACTURER TO [PURCHASER] UNDER THE [EQUIPMENT SALE CONTRACT], INCLUDING WITHOUT LIMITATION ANY LIABILITY FOR MECHANICAL WARRANTY CLAIMS OR FOR ANY BREACH OR FAILURE TO PERFORM UNDER THE [EQUIPMENT SALE CONTRACT], SHALL NOT EXCEED THE LIABILITY LIMITATION SET FORTH IN ] OF THE [EQUIPMENT SALE CONTRACT]. THE FOREGOING LIMITATIONS APPLY REGARDLESS OF WHETHER THE LIABILITIES OR DAMAGES ARISE OR ARE ALLEGED TO ARISE UNDER CONTRACT, TORT, STRICT LIABILITY OR ANY OTHER THEORY.
- (b) THIS PERFORMANCE WARRANTY IS MANUFACTURER'S SOLE AND EXCLUSIVE WARRANTY IN CONNECTION WITH THE PERFORMANCE OF THE CANNIBAL PROCESS. MANUFACTURER MAKES NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTIBILITY OR FITNESS FOR PURPOSE.

OWN	VER:	MANUFAC	CTURER: Envirex Inc
Ву:	William a Long	Ву:	dba USFilter's Environ Products Name
	Executive Director		Sr. Process Engineer
	Lo/15/07		March 18, 2005

# APPENDIX I Influent Conditions

# Influent Wastewater Characteristics

Warrant Parameter
Average Annual Conditions
Monthly Flow, mgd
20th DOD; mg/1
TKN, mg/l
- 1-3 - 1, 111 <u>6</u> /1
pH, standard units
Sufficient alkalinity is either present, or will be supplied by others, for complete nitrification.
Maximum Sulfate as SO <sub>4</sub> , mg/l
Inhibitory Matter and Heavy Metals Wastewater shall be biologically treatable and is not toxic or inhibitory to biological treatment. Concentrations not to exceed threshold limits as defined on page 227 of WPCF Manual of Practice No. 8, 1977 Edition (See Appendix III).

# APPENDIX II Performance Warranty Testing Procedures

- Testing Methodology and Sample Analysis.
- (a) All sampling and laboratory analysis methods and principles to be used for verification of any of the requirements of the Performance Warranty shall conform with the provisions of the most recent edition of "Standard Methods For The Examination of Water and Wastewater" (Standard Methods). Should situations develop warranting a necessary modification of any procedure in Standard Methods, the OWNER and MANUFACTURER may approve such modification upon express written consent of both parties.
- (b) (i) The OWNER shall provide evidence that its laboratory equipment and analyst capability meet the standards of precision and accuracy as stated in Standard Methods for each procedure. Federal EPA standard samples may be used to confirm compliance with those standards of precision and accuracy. The OWNER, with mutual agreement of MANUFACTURER, may substitute a state-certified commercial laboratory for analyzing all or part of the samples collected during any tests. The OWNER may also simultaneously analyze the samples as a back-up and/or check against analysis error. In the event a conflict of data develops, the data from the OWNER'S laboratory shall override any commercial laboratory data as to accuracy and/or reliability, given that justification for so doing is based upon sound laboratory evidence.
- (ii) OWNER shall provide MANUFACTURER with reasonable written notice in advance of initiating Performance Warranty Testing and MANUFACTURER shall be permitted to witness and/or participate in the analysis of any and all samples collected during such tests, and to independently collect and analyze additional samples. All data from the analyses shall be provided to the OWNER and shall be included in a performance analysis report to be furnished by MANUFACTURER to OWNER within 30 days of completion of a Performance Warranty Test Period.
- (iii) OWNER shall notify MANUFACTURER in writing at least one week prior to any biological solids wasting (a "wasting event") from the Facility and allow MANUFACTURER to be present to witness the wasting event and to participate in the sampling and analysis of the wasted biological solids. The OWNER shall complete and provide a copy to the MANUFACTURE a "Certificate of Biological Solids Wasting" within 30 days after the wasting event.
- (c) The costs of sampling and laboratory analysis shall be borne by the OWNER. This shall include testing to closely monitor and troubleshoot the Cannibal Process performance and is not limited to testing only for the OWNER's NPDES reporting purposes.
- (d) The Cannibal System, and the Facility, shall be operated by the OWNER and at its expense at all times during the Performance Warranty Testing Program.

# Performance Warranty Testing Program.

The Performance Warranty Testing shall be conducted over a period of twelve consecutive (except as set forth in Paragraph 7(b) below) thirty-day monthly testing periods (the "Performance Warranty Test Period"). Each monthly testing period will require the collection and laboratory analysis of not less than twelve (12) nor more than twenty (20) pairs (not necessarily consecutive) of influent and effluent samples as specified below.

Each of the influent and effluent samples shall be analyzed for pH, Total BOD<sub>3</sub>, Total Suspended Solids and TKN concentrations. Sulfate and Freon-soluble Fats, Oils and Greases shall be analyzed once at the start of the testing and again, only, if USFilter Envirex determines the measurement to be necessary. If toxicity/inhibition is suspected, influent will be analyzed for phenols, cyanide and those heavy metals identified in Appendix III.

Any biological solids removed from the process through a control wasting event shall be analyzed for Total Suspended Solids from not less than twelve (12) independent samples collected at various times during the wasting event. The volume of wasted solids shall also be measured and documented.

In the event certain data appear spurious and/or invalid, this data may be rejected upon mutual written agreement between the OWNER and MANUFACTURER. If the rejected data includes an influent or an effluent value for Total BOD<sub>5</sub>, Total Suspended Solids, and TKN Concentration, then all data for the influent and the effluent for that day shall be rejected and that pair shall not be included.

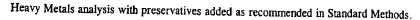
## 3. Sample Collection

Excepting solely for the Freon-solubles and Sulfides tests (addressed in paragraph 5 below), sampling equipment should be used which assures automatic 24-hour collection, with continuous flow and/or no periods of in-line liquid stagnation between flow intervals. The sampling lines shall be cleaned with bleach solution and thoroughly flushed with potable water before any tests and at not less than seven (7) day intervals during the performance tests.

If automatic sampling equipment is not available or malfunction occurs during testing, a manual program of grab samples at 2-hour intervals may be substituted until the equipment is available or repaired; provided that only suitably trained operators may be used by OWNER for the manual collection of grab samples.

# 4. Sample Preservation

The sample collection containers shall be maintained by OWNER at a temperature of 4 deg. C/39 deg. F to preserve the samples prior to laboratory analysis. Analysis for all parameters except Heavy Metals must be initiated within 8 hours of the 24-hour collection period. A 25 percent portion of all influent samples shall be retained by OWNER for up to thirty (30) days for possible



# Wastewater Analysis

Total BOD<sub>5</sub>, Total Suspended Solids, and TKN shall be determined on the freshly-mixed composite samples. Sulfate shall be determined in filtrate from the suspended solids determination and/or from filtrate obtained with larger filter pads of the same specifications recommended in Standard Methods for suspended solids. Fat, oil, and grease (Freon-soluble) shall be determined on separate individual samples obtained manually in glass bottles as specified in Standard Methods. A single grab sample should be taken for each analysis. Sulfide shall be determined on grab samples after fixatives have been added as specified in Standard Methods.

pH measurement and BOD, shall be at a fixed temperature. Samples shall be allowed to reach 20° C before measurement or dilution steps are performed.

# Flow and Temperature Measurement

Flow measuring devices and meters installed for full-scale service shall have been electrically calibrated by the supplier and the accuracy attested to in writing to the OWNER.

In an attempt to test the process at design conditions, alternate means of flow proportionment through the Cannibal Process shall be devised to a mutually satisfactory agreement between the OWNER and MANUFACTURER.

Temperature of the influent shall be obtained with a metallic dial thermometer continuously submerged in the liquid. This thermometer shall be calibrated before tests begin against a mercury filled glass thermometer and at weekly intervals during the Performance Warranty Testing Period.

# Performance Test Suspension and Resumption

(a) Adverse circumstances may develop beyond the control of the OWNER that interfere with the continuation of a Performance Warranty Test Program after the program has begun. In this event, if corrective measures cannot be implemented within 48 hours, the OWNER shall notify MANUFACTURER of the necessary suspension of the program. Any samples under analysis associated with the upset condition shall be disallowed from later performance calculations for the Performance Warranty Testing Period.

When conditions and circumstances have returned to normal, a suspended test may be resumed following notification of MANUFACTURER that the treatment system has again stabilized.

(b) The length of the Performance Warranty Testing Period shall be reduced, (i) if the condition set forth at Section 1(b)(ii) of the Performance Warranty is not satisfied, and/or (ii) the performance testing cannot be conducted due to circumstances not attributable to the breach by MANUFACTURER of its obligations hereunder. As an example, if compliant influent cannot be supplied for three months during the Performance Warranty Testing Program, the Performance

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Warranty Testing Period shall be nine thirty-day monthly periods. The Performance Warranty Testing Period shall be extended, day for day, for each day that performance testing cannot be conducted due to circumstances attributable to the breach by MANUFACTURER of its obligations hereunder.

# APPENDIX III From WPCF Manual of Practice No. 8 1977 Edition, Page 227 TABLE 14-III. Threshold Concentrations of Pollutants Inhibitory to the Activated Sludge Process

	Concentrati	Concentration (mg/l)		
POLLUTANT	Carbonaceous Removal	Nitrification		
Aluminum	15 to 26			
Ammonia	480			
Arsenic	0.1			
Borate (Boron)	0.05 to 100			
Cadmium	10 to 100			
Calcium	2500	_		
Chromium (hexavalent)	1 to 10	0.25		
Chromium (trivalent)	50			
Copper	1.0	0.005 to 0.5		
Cyanide	0.1 to 5	0.34		
Iron	1000	_		
Lead	0.1	0.5		
Manganese	10			
Magnesium		50		
Mercury	0.1 to 5.0			
Nickel	1.0 to 2.5	0.25		
Silver	5			
Sulfate	-	500		
Zinc	0.08 to 10	0.08 to 0.5		
Phenols: Phenol Cresol 2-4 Dinitrophenol	200 - -	4 to 10 4 to 16 150		
Insufficient Data.		-20		

# APPENDIX IV

# Penalty Calculations

The following table summarizes the values and methodology used for calculating the warranty penalties:

A. Design Criteria			
1. Design Flow		16	
2. Flow (est. during warranty period)		9	MGD
Flow (total annual during warranty)		3285	
Influent BOD concentration		250	
BOD Load (annual during warranty)     Conventional Yield following		6,849,225	lbs/Yr
Digester (w/out Cannibal)		0.50	ib/lb
7. Bio-Yield (conv. minus trash)		0.30	
8. Cannibal Yield at Failure			lb/lb
9. Guaranteed Yield		0.30	
· · · · · · · · · · · · · · · · · · ·		0.10	lb/lb
B. Waste Sludge Quantities			
Conventional System		3,424,613	lbs/Yr
Cannibal System at Failure		2,054,768	lbs/Yr
3. Guarantee		684,923	lbs/Yr
C. Penalty Calculations			
1. Pounds Over Warranty at Failure		1,369,845	lbs/Yr
0.144.7		.,	wet
2. Wet Tons Over Warranty at Failure		2,854	tons/Yr
3 Anticipated Diseased Ocea			per wet
3. Anticipated Disposal Cost	\$	42.55	ton
4. Anticipated % solids			24.00%
5. Execess Annual Disposal Costs at Failure	\$	121,431	
Projected Annual Savings (during warranty period)     Note: savings base on sludge     disposal only	\$	261,959	per year
7. Equipment Cost	\$	1,560,000	
8. Payback Period	•	6.0	years
9. Maximum Total Penalty Cost	\$	723,138	years
10. Maximum Total Penalty after First	•	120,100	
3 Years	\$	358,845	

# D. Penalty Table

		T-		Т	_		
	Actual	Annual Penalty		Penalty after	Total		
	Bio-Yield	(first three years)		three years	Penalty		
	0.10	\$	-	s -	s	-	
	0.15	\$	30,358	\$ 89,711	Š	180.784	
ı	0.20	\$	60,716	\$ 179,422	\$	361.569	
ı	0.25	\$	91,073	\$ 269,133	\$	542,353	
	0.30	\$	121,431	\$ 358 845	\$	723 138	

Date Filed 08/09/13 3:13-cv-02159-CMC Entry Number 1-1 Page 35 of 71

Richland County Common Pleas

Clerk : Jeanette W. McBride Richland County Judicial Center Columbia, SC 29201 (803) 576-1999

**DUPLICATE** 

Received From:

Paying for:

Total Paid:

Jeter, Edwin Russell Jr.

PO Box 7425

Columbia, SC 29202 East Richland County,

Transaction Type: Payment Payment Type:

Check

\$150.00

\$150.00

Date: 7/ 1/2013

Receipt #: 162788

Clerk: COCMETTS

Reference #: 8389 Comment:

Non-Refundable

Case # Caption Previous Balance Amount Paid Balance Due 2013CP4003791 East Richland County vs Siemens Water \$150.00 \$150.00 \$0.00 140

Total Cases: 1

\$150.00

\$150.00

\$0.00



Service of Process **Transmittal** 07/11/2013

CT Log Number 523088000

TO:

**Daniel Histip** 

Siemens Industry, Inc. 1000 Deerfield Parkway Buffalo Grove, IL 60089-4513

HE:

Process Served in South Carolina

FOR:

Siemens Industry, Inc. (Domestic State: DE)

ENCLOSED ARE COPIES OF LEGAL PROCESS RECEIVED BY THE STATUTORY AGENT OF THE ABOVE COMPANY AS FOLLOWS:

TITLE OF ACTION:

East Richland County Public Service District, Pltf. vs. Envirex, Inc., et al. including

Siemens Industry, Inc., Dfts.

DOCUMENT(S) SERVED:

Letter, Amended Summons, Amended Complaint, Exhibit(s), Attachment(s)

COURT/ABENCY:

Richland County Court of Common Pleas, SC Case # 2013CP403791

MATURE OF ACTION:

Defendant failure to dispose studge and waste solids in treatment plant operated by

defendant

ON WHOM PROCESS WAS SERVED:

CT Corporation System, Columbia, SC

BATE AND HOUR OF SERVICE:

By Process Server on 07/11/2013 at 11:25

JURISDICTION SERVED:

South Carolina

APPEARANCE DR ARBITER DUE:

Within 30 days after the service hereof, exclusive of the day of such service

ATTORNEY(S) / SENDER(S):

Edwin Russell Jeter Jetter & Williams, P.A. 1204 Main street Suite 200 Columbia, SC 29202 803-765-0600

DEMARKS:

Please note the process server underlined and/or highlighted the entity being

served prior to receipt by CT.

ACTION ITEMS:

CT has retained the current log, Retain Date: 07/11/2013, Expected Purge Date: 07/16/2013

Image SOP

Image sor Email Notification, Helena Almeida helena.almeida@siemens.com Email Notification, Karen Zimbler karen.zimbler@siemens.com Email Notification, Daniel Hislip daniel.hislip@siemens.com Email Notification, Skip Lockard skip.lockard@siemens.com Email Notification, Laura Goodman laura.goodman@siemens.com Email Notification, Tamika Lynch tamika.lynch@siemens.com Email Notification, Gina Weiner gina.weiner@siemens.com

SMAFE-ADDRESS:

CT Corporation System Army McLaren 2 Office Park Court Suite 103 Columbia, SC 29223

Page 1 of 2 / RP

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Service of Process Transmittal 07/11/2013 CT Log Number 523088000

TO:

Daniel Hislip Siemens Industry, Inc. 1000 Deerfield Parkway Buffalo Grove, IL 60089-4513

RE:

Process Served in South Carolina

FOR:

Siemens Industry, Inc., (Domestic State: DE)

TELEPHONE

800-592-9023

Page 2 of 2 / RP

Information displayed on this transmittal is for CT Corporation's record keeping purposes only and is provided to the recipient for quick reference. This information does not constitute a legal opinion as to the nature of action, the amount of damages, the answer date, or any information contained in the documents themselves. Recipient is responsible for interpreting said documents and for taking appropriate action. Signatures on certified mail receipts confirm receipt of package only, not contents,

# Jeter & Williams, P.A.

Edwin Russell Jeter Daryl L. Williams 1204 Main Street, Suite 200 (29201)\* Post Office Box 7425 Columbia, South Carolina 29282 Tel. 803/765-0600 Fax 803/765-0619

July 11, 2013

CT Corporation 2 Office Park Court, Suite 103 Columbia, SC 29223

Re: East Richland County Public Service District v. Envirex, Inc., Siemens Water Technologies Corp., Siemens Water Technologies Holding Corp., Siemens Industry, Inc., Siemens Water Technologies LLC, Doe I-III (Fictitious Names), and Siemens AG, Civil Action No. 2013-40-CP-3791

Dear Sir:

Enclosed for service upon you as registered agent for <u>Siemens Industry Inc.</u> is the Amended Summons and Amended Complaint in the above-referenced matter. This Amended Summons and Amended Complaint is being hand-delivered to your office by our process server.

Please accept my kind regards.

Sincerely yours,

Edwin Russell Jeser

cc: Scott A. Elliott, Esq.

STATE OF SOUTH CAROLINA COUNTY OF RICHLAND	) ) )	IN THE COURT OF COMMON PLEAS C/A No. 2013-CP-40-3791
East Richland County Public Service District,  Plaintiff,  vs.  Envirex, Inc., Siemens Water Technologies Corp., Siemens Water Technologies Holding Corp., Siemens Industry, Inc., Siemens Water Technologies LLC, Doe I-III (Fictitious Names), and Siemens AG,  Defendants.	)	AMENDED SUMMONS (JURY TRIAL DEMANDED)  AMENDED SUMMONS (JURY TRIAL DEMANDED)
	)	

### TO THE DEFENDANTS ABOVE NAMED:

YOU ARE HEREBY SUMMONED and required to answer the Complaint in this action, a copy of which is herewith served upon you, and to serve a copy of your Answer to the said Complaint upon the subscriber, at Jeter and Williams, P. A., 1204 Main Street, Suite 200 (29201), Post Office Box 7425, Columbia, South Carolina 29202, within thirty (30) days after the service hereof, exclusive of the day of such service; and if you fail to answer the Complaint in the time aforesaid, a judgment by default will be rendered against you for the relief demanded in the Complaint.

JETER & WILLIAMS, P. A.

y Call

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July \_\_\_\_\_, 2013 Columbia, South Carolina

STATE OF SOUTH CAROLINA COUNTY OF RICHLAND	)	IN THE COURT OF COMMON PLEAS
COUNTY OF RICHLAND	,	C/A No. 2013-CP-40-3/91
East Richland County Public	)	A B
Service District,	)	CHLA FIT C.C.T
Plaintiff,	)	AMENDED COMPLAINT 3 FIG
vs.	)	(JURY TRIAL DEMANDE)
Envirex, Inc., Siemens Water	)	2
Technologies Corp., Siemens Water	)	
Technologies Holding Corp.,	)	
Siemens Industry, Inc., Siemens Water	)	
Technologies LLC, Doe I-III (Fictitious	)	
Names), and Siemens AG,	)	
Defendants.	) _)	

The Plaintiff, East Richland County Public Service District, complaining of the Defendants, would allege and prove as follows:

- 1. The Plaintiff, East Richland County Public Service District ("East Richland"), is a special purpose district created by the General Assembly for the purpose of providing safe and reliable disposal of sewage in Northeast Richland County. East Richland is a public, non-profit political subdivision with the power to enter into contracts and pursue litigation as necessary.
- 2. The Defendant Envirex, Inc., is a Delaware corporation. Envirex, Inc. has done business in Richland County in connection with the East Richland project described herein.
- 3. The Defendant Siemens Water Technologies Corp. is a Massachusetts corporation. It has done business in Richland County in the State of South Carolina in connection with the East Richland project as alleged herein. Based upon filings with the South Carolina Secretary of State by the merging companies, Envirex, Inc. merged with Siemens Water Technologies Corp.,

- a Massachusetts corporation, effective August 31, 2006, and the name of the surviving entity was Siemens Water Technologies Corp.
- 4. The Defendant Siemens Water Technologies Holding Corp. is a Delaware corporation.

  Based upon filings with the South Carolina Secretary of State by the merging companies,

  Siemens Water Technologies Corp. merged with Siemens Water Technologies Holding Corp., a

  Delaware corporation, effective April 1, 2011, and the name of the surviving entity is Siemens

  Water Technologies Holding Corp. It has done business in Richland County in the State of

  South Carolina in connection with the East Richland project as alleged herein.
- 5. Therefore, upon information and belief, based upon the filings with the South Carolina Secretary of State, Siemens Water Technologies Holding Corp. is the successor to Siemens Water Technologies Corp., which is the successor to Envirex, Inc.
- 6. Siemens Industry, Inc. is upon information and belief, a Delaware corporation. A July, 2011, draft report to East Richland bore the name of Siemens Industry, Inc. on one page and the name of Siemens Water Technologies Corp. on another page. Siemens Industry, Inc. has given notice that it intended to transfer the assets and liabilities of its Water Technologies Business Unit to Siemens Water Technologies LLC, effective July 1, 2013. Upon information and belief, Siemens Industry Inc. may have responsibility to Plaintiff as the successor to either Envirex, Inc., Siemens Water Technologies Corp., or Siemens Water Technologies Holding Corp., therefore East Richland is naming Siemens Industry, Inc. as a Defendant.
- 7. Siemens Water Technologies LLC, is upon information and belief, a foreign limited liability company organized under the laws of Delaware, with its principal place of business in Alpharetta, Georgia. Siemens Water Technologies LLC as a successor or assignee of Siemens Industry Inc., may have responsibility to Plaintiff as a successor to either Envirex, Inc., Siemens

Water Technologies Corp., Siemens Water Technologies Holding Corp., or Siemens Industry, Inc., therefore East Richland is naming Siemens Water Technologies LLC as a Defendant.

- 8. In the event that the successors to Envirex Inc., Siemens Water Technologies Corp., or Siemens Water Technologies Holding Corp. are incorrectly identified, the true names or capacities, whether individual, corporate, representative, associate or otherwise of Defendants Doe I III are not known to Plaintiff, who therefore sues them by these fictitious names of Doe I, Doe II, and Doe III representing the successors to Envirex, Inc., Siemens Water Technologies Corp., and Siemens Water Technologies Holding Corp., respectively. Plaintiff will seek to amend to state the true names and capacities once they have been ascertained.
- 9. Siemens AG is upon information and belief the parent company of the other Defendants, and is incorporated in a country other than the United States. Upon information and belief it has done business in the State of South Carolina through is subsidaries, and upon information and belief continues to do business in this State. Upon information and belief, Envirex, Inc., Siemens Water Technologies Corp., Siemens Water Technologies Holding Corp., Siemens Industry Inc., Siemens Water Technologies LLC, were or are wholly owned subsidiaries of Siemens AG, and were or are included on the consolidated balance sheet of Siemens AG. Upon information and belief, Siemens AG has managed the various mergers and other changes in ownership of its subsidiaries, and Siemens AG may have responsibility to Plaintiff as a successor or parent to either Envirex, Inc., Siemens Water Technologies Corp., Siemens Water Technologies Holding Corp., Siemens Industry, Inc., or Siemens Water Technologies LLC, therefore East Richland is naming Siemens as a Defendant.
- 10. The Defendants are referred to collectively as "Siemens" in this Complaint.
- 11. East Richland collects and treats sewage in the northeastern portion of the County of

Richland, State of South Carolina. Its service area includes the Towns of Forest Acres and Arcadia Lakes, and various unincorporated areas of northeastern Richland County.

- 12. Because the sewage East Richland treats is primarily residential and commercial, the influent going into its treatment plant is within a normal range for influent characteristics.
- 13. East Richland operates a treatment plant known as the Gills Creek Waste Water

  Treatment Plant ("Gills Creek Plant") which is located near the location where Gills Creek
  enters the Congaree River.
- 14. East Richland has been subject to an effluent phosphorous limit during all times relevant to this Complaint. This limit is a matter of public record and was therefore available to Siemens, and if Siemens inquired of East Richland, it would have been immediately disclosed to Siemens.
- 15. At 9 million gallons a day of flow (9 mgd), the current plant level, the treatment process naturally removes about 150 pounds a day of phosphorous, or about 1.65 mg/l, from the East Richland influent without any special treatment.
- 16. The phosphorous limit, based on current plant flow, is 2 mg/l based on content, or 105 pounds a day (lbs/day) based upon mass. Thus under normal circumstances, the natural processes of treatment would remove more than enough phosphorous to meet the concentration limit of 2.0. Under the mass limit, which is 105 pounds per day of phosphorous, the plant has been averaging substantially fewer pounds per day in its effluent.
- 17. To remove phosphorous beyond that removed by natural processes, alum is added to the wastewater which aids with the absorption of the phosphorous. Over the five year period since 2007, East Richland has rarely added alum to its wastewater. The amount of alum added since 2007 is an immaterial amount for purposes of treating the wastewater.
- 18. Around 2003, East Richland decided to update the Gills Creek Plant and increase its

capacity to 16 mgd. During construction of the plant, the compost system ceased working and East Richland had to decide how to handle the sludge produced by the plant. East Richland's engineer and plant operator had heard of a new process called the cannibal system which was represented to greatly reduce the amount of sludge wasted to the landfill. They contacted Envirex, Inc. to explore whether it was a suitable alternative for the plant in terms of performance and cost.

- 19. East Richland dealt with Envirex, Inc. until its merger with Siemens Water Technologies Corp. in August, 2006, at which time Siemens Water Technologies Corp. began to deal with East Richland.
- 20. East Richland was operating the Gills Creek Plant using a conventional treatment system. The by-product of a conventional system is sludge that has to be disposed of by some method. The cannibal process is an attempt to decrease the amount of waste solids, which thereby reduces the cost of disposing of sludge.
- 21. Siemens provided East Richland with preliminary information about the cannibal system and how it would reduce costs. Siemens represented that the cannibal system was a "revolutionary technology." According to Siemens, while each plant required a custom process design, the process could easily be retrofitted into existing plants to reduce the amount of biological solids wasted and the operating costs. Siemens stated the system would cut operating costs by reducing or eliminating the need for sludge hauling and disposal costs, and cutting down on the energy expense to run the aeration equipment, among others. The principal savings would result from wasting less sludge to the landfill. Siemens stated once it obtained a "thorough understanding of your facility, the operation, and the waste characteristics," it would provide a design and budgetary estimate for the customer.

- By early May, 2004, Siemens had sent preliminary equipment lists and flow diagrams, cost data, and savings comparisons to East Richland. They also sent a detailed questionnaire covering influent/effluent conditions, plant conditions, operating costs, solids disposal data, and other issues. In mid-May, 2004, Siemens provided preliminary projected cost savings for the Gills Creek Plant, with most of the savings (\$465,704) coming in sludge handling. Siemens represented to East Richland that the amount of sludge that would be wasted would be 0.1 lbs/lb of BOD or less.
- During the Siemens sales presentation, representatives of East Richland traveled to an operating plant in Byron, Illinois. This plant handled 336,000 gallons a day. Siemens represented that sludge wasting had been reduced substantially and that the plant was operating satisfactorily. Siemens provided performance and cost data based upon several years of operation. Once again, the data provided by Siemens represented that the ratio of sludge waster per pound of BOD would be 0.1 or less.
- 24. By early September, 2004, Siemens represented that all equipment, permitting, engineering, construction, start-up and training could be provided for a guaranteed not to exceed price of \$3,198,000.
- 25. In late October, 2004, Siemens provided East Richland its detailed proposal for the system. This proposal included a performance warranty: "USFilter, Envirex Products, will provide a one (1) –year guarantee that the amount of sludge wasted (not including screenings and grit) will not exceed 0.1 pounds per pound of influent BOD."
- The cannibal system was new and "revolutionary," and was proprietary to Siemens.

  There were a number of unknowns to East Richland in using the cannibal system. The only operating plant East Richland had seen was a small plant. In order to mitigate the risk to East

Richland, Siemens was willing to enter into a performance warranty guaranteeing results. The performance standard in the warranty was that the amount of sludge that would be wasted would be 0.1 lbs. per lb. BOD. If the performance standard could not be met, there would be payments due to East Richland for Siemens' failure to achieve the promised savings. At no time however, did Siemens present, nor did East Richland consider, the risk of deception or cover-up on the part of Siemens, as being covered by or subject to the terms of the performance warranty.

- 27. In November, 2004, East Richland's engineer sent Siemens, at their request, at least two years of data from December, 2002 to October, 2004, showing the total phosphorous in the influent and effluent of the Gills Creek Plant. This data showed the historic average phosphorous level of the influent was 2.8 mg/l. The historic average phosphorous level in the effluent was 1.2 mg/l. Thus, the plant was meeting its phosphorous limit through the natural removal of phosphorous. East Richland understood from its own experience that there would be no need to use alum more than rarely to meet the limit, and Siemens never stated that understanding was incorrect prior to the parties entering the contract.
- After reaching the promised "thorough understanding of your facility, the operation, and the waste characteristics," in December, 2004, Siemens sent East Richland the last pre-contract representation concerning expected savings from using the cannibal system. Siemens represented the savings would amount to over \$600,000 a year, with most of that coming from sludge handling. Thus, over three years the expected savings would be over \$1.8 million.
- 29. On December 21, 2004, Siemens sent East Richland its revised proposal. For the first time, Siemens raised the issue of phosphorous limits. For the prior seven months, Siemens had consistently represented its system would meet the 0.1 standard at the Gills Creek Plant. In this proposal, Siemens repeated that warranty, although with a new title: "Warranty Assuming the

Treatment Plant Does Not have an Effluent Phosphorous Limit: Annual yield 0.1 biosolids\* removed/lb CBOD removed, where influent wastewater TSS/BOD is not to exceed 1.0."

However, Siemens added alternate warranty language which it had never discussed with East Richland: "Alternate Warranty should the Treatment Plant have an Effluent Phosphorous Limit: Annual yield 0.28 biosolids\* removed/lb CBOD removed, where influent wastewater TSS/BOD is not to exceed 1.0."

- 30. The language referenced by the \*, stated: "... In the event that the plant has an effluent phosphorous limit, chemicals will need to be added to precipitate and remove phosphorous and extra biosolids will need to be wasted from the plant to remove the chemical phosphorous solids under these conditions, the alternate warranty would apply and biosolids would include the chemical-phosphorous solids."
- Based upon the representations of Siemens, East Richland reasonably understood that the alternate warranty would not apply to it since the conditions triggering the alternate warranty in the \* language, the use of chemicals to remove phosphorous, did not apply to East Richland. Siemens knew East Richland's history of small phosphorous amounts in its influent and effluent, and knew or should have known of East Richland's effluent phosphorous limits. Yet, Siemens, never indicated to East Richland that it considered East Richland would be under the alternate language. East Richland reasonably understood that Siemens was agreeing it would meet the 0.1 standard at East Richland, as had been the understanding for the previous seven months.
- Siemens executed and sent the performance warranty to East Richland on March 23, 2005. However, William Long, East Richland's Executive Director did not sign or return the performance warranty immediately. He executed the performance warranty on June 15, 2007. A copy is attached hereto as Exhibit A.

33.

- On or about March 31, 2005, Siemens representatives attended a meeting with East
- Richland to explain the system to East Richland's Board and personnel. In a follow-up letter to that meeting, Siemens represented to East Richland that using cannibal would result in "an up to
- 90% reduction in biological solids disposal." The reference to a 90% reduction represented that
- the 0.1 standard would apply to East Richland, and was so understood by East Richland.
- 34. Based upon this understanding, East Richland began to issue work orders in May, 2005, for the necessary equipment and related items to construct the cannibal system. The total cost of the work was estimated to be \$3,198,000.
- 35. After the work was complete and the Gills Creek Plant started operating with the cannibal system, it took time to stabilize the operation but by July, 2007, Siemens, through Siemens Water Technologies Corp., which was the successor in interest to Envirex, Inc., reported the plant was operating steadily.
- 36. Under the terms of the performance warranty, Siemens had a three year period to reach its performance goal, before large lump sum payment would be due. Meeting its performance standard after the first year would satisfy the warranty and discharge Siemens from any further performance obligation. If Siemens did not reach its goal after the first year, it would have a second year in which to meet the standard, and then a third year, if necessary. However, each year Siemens failed to meet the performance standard Siemens would owe agreed payments to East Richland. If at the end of three years, Siemens had not met its warranty obligations, it would owe East Richland a further lump sum amount.
- 37. Siemens wrote East Richland that final start-up of process operations and equipment was completed on July 12, 2007, and therefore, "the Performance Warranty Test Period will begin on that date." The warranty testing period would end on July 12, 2010, unless successful results

were achieved at an earlier date.

- 38. East Richland sent samples and data to Siemens on a regular basis.
- 39. On December 1, 2008, Siemens reported to East Richland that since July 2007, Gills Creek's cannibal system had reached a treated value of 0.28. Although the letter noted that result "is right on track" for the expected result where a plant has an effluent phosphorous limit, it stopped short of declaring that it had met the warranty provision and that the warranty had been satisfied. Siemens also acknowledged that this result had been met without adding chemicals to remove phosphorous. Then, Siemens told East Richland for the first time that as the amount of sludge wasted dropped, the relative lack of sludge to absorb phosphorous would mean that chemicals would have to be added in order to meet the effluent standard. That statement, which meant that Siemens considered the 0.28 standard applied to East Richland, instead of the 0.1 standard, came almost four years after issuance of the first work orders to Siemens for the cannibal system, based upon the understanding that the 0.1 standard applied.
- 40. However, instead of declaring the warranty period ended because of the 0.28 result, Siemens stated in the same letter, "We will continue to work with the plant to improve Cannibal performance, but at some point, that improvement will come at the cost of adding chemical to remove phosphorous."
- There was no reason for East Richland to question the 0.28 test results. Siemens was a leader in its field with an excellent reputation. The results were being reported by professional engineers and lab personnel whose integrity was not in doubt. The Siemens personnel were experts in the new field that cannibal represented. This result was for the first year, and there were no other years' data which would cast any doubts upon the results. The results from a new technology, which were within the stated range of possible outcomes, was the type of data upon

which East Richland's engineer and personnel would normally and reasonably rely. The issue which the parties were focused upon was whether the 0.1 standard applied, which had still not been met, or whether the 0.28 standard applied which Siemens reported had been met the first year.

- 42. The efforts to improve the cannibal performance continued for months. While Siemens was working with East Richland on a regular basis, their efforts were proving unsuccessful. On August 26, 2009, William Long wrote Siemens reminding them of their performance warranty obligations to reach the 0.1 standard, and while expressing gratitude for their efforts, stated that due to the failure to meet the 0.1 benchmark, it was now necessary to have a meeting to discuss the cannibal operations at the Gills Creek Plant.
- Siemens responded on September 14, 2009, claiming for the first time that Siemens had 43. achieved the 0.28 benchmark, and that the performance warranty period had ended on July 12, 2008. The 0.28 results were based on its calculations from the raw data provided by East Richland. However, Siemens did say it was continuing "to support the plant staff to optimize and improve the process...."
- 44. On January 20, 2010, the parties met to discuss their issues and try to map out a way forward. Siemens reported its yield for the last year, 2009, was 0.32. The parties agreed they would extend the time for resolving problems, in light of the acknowledged failure of the cannibal system to perform as intended (under either standard) during year two. They agreed to extend the testing period in an effort to resolve the problems. As a result of this meeting, Siemens agreed to provide suggested operations and optimizations going forward. The parties agreed that the optimization period would run for one year once normal operations were restored after a period of abnormally high flows. East Richard would take samples and generate the

performance warranty data sheets on a monthly basis and send them to Siemens. The bi-weekly conference calls would be re-started. Siemens agreed to provide its services at no charge, and East Richland understood that the performance wairanty period was being extended to allow for the extended testing.

- In March, 2010, Siemens issued a Seasonal Operations Plan for the Gills Creek Plant that sought to improve performance by recommending different modes of operation for the seasonal variations in influent flow and solids production.
- Although it was not clear whether Siemens was dealing with East Richland through Siemens Industry, Inc., or through Siemens Water Technologies Holding Corp., as successor in interest to Siemens Water Technologies Corp., Siemens claimed that the lack of performance was due to East Richland's staff and procedures. To resolve this issue, in 2011, Siemens and East Richland agreed to allow Siemens to direct the detailed operations of the plant for one year and Siemens would provide these services free of charge. It was understood by East Richland that the performance testing period would be extended from June, 2011 until June, 2012, while Siemens was in control of plant procedures. East Richland followed the instructions of Siemens but its data showed the results still did not improve. In 2012, East Richland decided to stop operating the cannibal system due to the lack of performance by Siemens.
- For the four quarters before Siemens took over control of the plant, East Richland now calculates the average yield was 0.54. In the four quarters that Siemens controlled the operations, East Richland calculates the results were once again 0.54. In the three quarters since East Richland stopped operating cannibal, East Richland calculates the average yield has been 0.53. It is now apparent that cannibal did not provide materially better solids yields than were

produced when operating without the cannibal system.

- 48. Siemens had reported in its letter of December 1, 2008, that it had achieved a 0.28 result during the first year of performance warranty testing. However in 2013, given how the results without cannibal compared to the results with cannibal, East Richland researched its data. According to calculations based on the data that East Richland is informed and believes was provided to Siemens during the performance testing period, the actual yield in the first year of warranty testing was not 0.28 but was in fact at least 0.35 lbs (or more) of solids removed/lb of CBOD removed. That result is more than 25% in excess of the warranty limit of 0.28.
- Upon information and belief: Siemens covered-up that it failed to meet the 0.28 standard in the first year, and it covered up that it failed to meet its performance warranty standard during the performance warranty testing periods; Siemens failed to report the 0.35 results despite having the data in its possession that had been furnished to it by East Richland which showed results of 0.35 or more; and, Siemens issued this false report intending that East Richland would conclude that Siemens had met the 0.28 standard of the performance warranty and would not pursue its right to payments under the performance warranty.
- East Richland relied upon the results reported by Siemens in that had it known the true results: East Richland would have aggressively pursued its warranty rights instead of forbearing out of concern that Siemens may have actually met the applicable standard; and East Richland would have filed suit over the warranty violations at the end of the three year period.
- From December 1, 2008, until May, 2013, East Richland did not know that Siemens failed to satisfy any of its warranty requirements, including the 0.28 standard, during the first year of the performance testing period, or later. As a result, East Richland waited from December, 2008 on, before filing suit.

- As stated earlier, East Richland had no reason to believe the 0.28 report was wrong.

  The 0.28 result was for the first year, and when the results did start to worsen, Siemens blamed East Richland and the seasonal fluctuations due to the climate for the poor performance. It was not until 2013 that East Richland had reasons to question the reported 0.28 result.
- East Richland has brought this action within three years of Siemens' failure to meet the 0.1 performance warranty by July 12, 2010.
- East Richland has brought this action within weeks of learning of Siemens' failure to meet the 0.28 performance warranty by July 12, 2010.
- East Richland was prejudiced by Siemens' concealment of its failure to meet the warranty standard, in that it accepted the 0.28 results as being true and did not seek interim penalty payments, and did not file suit against Siemens for its violation of the 0.28 standard, until now.
- Upon information and belief, Siemens sold other public entities, i.e. municipalities.

  Cannibal systems that did not work. East Richland is informed and believes that the Town of Summerville has shut down its cannibal system after disappointing results that differed from those promised, although Siemens falsely told East Richland the system was doing fine and there were no problems. Upon information and belief, the Town of Holly Springs, North Carolina, has shut down its cannibal system and is facing financial distress as a result of the unacceptable results from the cannibal system. East Richland is informed and believes that there are numerous other utilities that relied on the Siemens warranty and have found that the system does not work as warranted.

### FOR A FIRST CAUSE OF ACTION

57. East Richland re-alleges paragraphs 1 through 56 as fully as if set forth herein.

- 58. Siemens warranted to East Richland that its cannibal system would result in performance results as stated in the performance warranty.
- 59. The performance warranty provided for a three year performance warranty in which Siemens was to reach the benchmark performance.
- 60. The three year warranty period began on July 12, 2007.
- Three years later, on July 12, 2010, Siemens had failed to meet either the 0.1 or the 0.28 performance benchmarks.
- As a result of Siemens' failure to meet the performance warranty benchmark, and because its yield has exceeded 0.28 each year, and because said failure has extended beyond the three year period in the performance warranty's "Excess Biosolids Penalty Table," East Richland is entitled to the applicable payments shown in the Penalty Table of Exhibit A. Further, because the damages are a sum certain amount, East Richland asks for pre-judgment interest from the date of the breach.

### FOR A SECOND CAUSE OF ACTION

- 63. East Richland re-alleges paragraphs 1 through 62 as fully as if set forth herein.
- 64. Siemens reported the first year performance test results as being 0.28 lbs of biosolids removed per lb of CBOD, which met the performance warranty requirement. Upon information and belief, Siemens concealed the actual results of the performance testing from East Richland. The actual results were 0.35 (or more) lbs of biosolids removed per lb of CBOD, which was 25% higher than warranted. This concealment by Siemens was, upon information and belief, dishonest in fact, constituted unfair dealing, or was an unlawful appropriation by design of East Richland's right to penalty damages.
- 65. Notwithstanding Siemens' report that it reached the 0.28 standard in the first year,

Siemens failed to meet the 0.28 solids wasting ratio, in breach of its warranty.

- Upon information and belief, the concealment of the actual results was intended to, and did mislead East Richland into believing Siemens had satisfied the warranty requirement, thereby covering-up the true performance in order to escape from liability for the poor performance of the cannibal system. This concealment of the actual results was separate and distinct from the breach of contract itself, but was still closely connected to the breach, and therefore the concealment is an actionable independent fraudulent act.
- 67. Upon information and belief Siemens acted with willful and fraudulent intent in reporting that the first year's performance was 0.28, in that Siemens knew that the actual results were materially higher than 0.28.
- 68. As a result of Siemens' concealment, East Richland did not seek interim or final payments for violation of the 0.28 standard, and did not file a legal action until the actual results were discovered.
- 69. The fraudulent acts and intent in connection with the breach of contract also violate the covenant of good faith and fair dealing inherent in each and every contract.
- 70. East Richland is informed and believes that it is entitled to recover punitive damages in addition to actual damages, as a result of the fraudulent acts and intent accompanying the breach of contract. Further, East Richland asks that it be awarded pre-judgment interest upon the actual damages from the date of the breach.

### FOR A THIRD CAUSE OF ACTION

- 71. East Richland re-alleges paragraphs 1 through 70 as fully as if set forth herein.
- 72. East Richland has suffered an ascertainable loss of money or property as a result of purchasing and installing the cannibal system for \$3,198,000, and not achieving the savings upon

which the purchase was represented and warranted to perform, some of which savings losses are represented by the applicable agreed payments. In addition, East Richland's excess sludge handling, power, and chemical costs for dealing with excess sludge wasting over and beyond that warranted by Siemens, constitute losses which are not compensated by the agreed payments in that: the losses from handling excess sludge include extra power and chemical costs during processing that are not covered by the calculation; the amount of excess sludge handling exceeds the maximum amounts used in calculating the agreed payments; and the excess sludge handling costs mean that, even with the agreed payments, the payback period for equipment costs will exceed the six years used in the payment calculation.

- Upon information and belief, that loss of money was the result of the use or employment of an unfair or deceptive method, act or practice declared unlawful by S.C. Code Ann. §39-5-20, in that Siemens marketed and sold East Richland a unique and revolutionary system that did not work as warranted, which Siemens then intentionally or recklessly covered-up by concealing the true results in a manner designed and likely to mislead East Richland, thereby causing a substantial loss to East Richland, which was acting reasonably in believing that Siemens had met the 0.28 standard during the first year of testing.
- East Richland, as a public service district, represents the public interest in that it seeks to protect the interests of its sewer customers. Siemens' wrongful acts and omissions effect the public interest in that East Richland did not receive either the promised savings nor the performance warranty payments, despite the large sums spent on constructing and installing the system. In addition, East Richland is informed and believes that Siemens sold cannibal systems that did not work to other public utilities, and therefore the cover-up of cannibal's performance failures is capable of repetition.

75. For the reasons specified above, these acts and omissions were willful and knowing violations of the Unfair Trade Practices Act, that entitle East Richland to recover actual damages which should be trebled by the Court, plus pre-judgment interest and attorney's fees.

### FOR A FOURTH CAUSE OF ACTION

- 76. East Richland re-alleges paragraphs 1 through 75, not inconsistent herewith, as fully as if set forth herein.
- 77. Further pleading in the alternative, this Court should use its equitable powers to reform
  the performance warranty to properly reflect the agreement of the parties.
- 78. The parties intended that the cannibal system would reduce wasting of sludge to the level of 0.1 lbs of biosolids removed per lb of BOD removed. Only if East Richland needed to add chemicals to precipitate and remove phosphorous, and extra biosolids had to be wasted to remove the chemical phosphorous solids, thereby materially changing the amount of biosolids removed, would the alternate warranty apply.
- 79. East Richland did not need to introduce chemicals to remove phosphorous in order to meet its effluent limits. It only rarely added alum to the liquor, and then, only in immaterially small amounts. Siemens repeatedly represented to East Richland that the 0.1 benchmark would apply.
- 80. If the performance warranty is held to state that the mere existence of a phosphorous effluent limit, standing alone, or along with the rare and immaterial use of alum, is sufficient to apply the alternate warranty based upon a yield of 0.28, then there has been a mutual mistake of the parties where a material term has been omitted which had been agreed to by the parties orally, or there has been a unilateral mistake by East Richland, procured by misrepresentations of Siemens as to which benchmark would apply, without negligence on the part of East

Richland.

Accordingly, good grounds exist for the Court to use its equitable powers to reform the performance warranty to accurately reflect the agreement of the parties or to correct a unilateral mistake procured by misrepresentation. Further, having reformed the contract terms, this court should then award damages as appropriate to reflect the parties' agreement, and award East Richland pre-judgment interest as allowed by law.

WHEREFORE, Plaintiff prays for judgment in its favor in the amount of its actual damages, treble damages as awarded by the Court, punitive damages, attorneys' fees, prejudgment interest, the costs of this action, and for such other and further relief as this Court may deem just and equitable.

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#### USFILTER'S ENVIREX PRODUCTS

# PROCESS PERFORMANCE WARRANTY for the CANNIBAL<sup>TM</sup> SOLIDS REDUCTION PROCESSES for East Richland County, SC - Gills Creek WWTP

This document and Appendices I-V hereto provides a process performance warranty ("Performance Warranty") by Envirex Inc. dba USFilter's Envirex Products (hereinafter referred to as MANUFACTURER) to East Richland County Public Service District, SC (hereinafter known as the OWNER) for the USFilter's Envirex Products Cannibal™ Solids Reduction Process (the "Cannibal Process") for the Gills Creek, SC Wastewater Treatment Plant (the "Facility").

### Section 1 - Statement of Biosolids Production Warranty.

(a) Subject to each of the provisions of this Performance Warranty, including without limitation the conditions set forth in Section 1(b) hereof, MANUFACTURER warrants to the OWNER that, the Cannibal System shall not exceed the biosolids\* production as defined below.

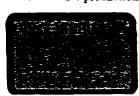
Warranty Assuming the Treatment Plant Does Not have an Effluent Phosphorus Limit: Annual yield 0.1 lb biosolids\* removed/lb CBOD, removed, where influent wastewater TSS/BOD is not to exceed 1.0.

Alternate Warranty should the Treatment Plant bave an Effluent Phosphorus Limit: Annual yield 0.28 lb biosolids\* removed/lb CBOD, removed, where influent wastewater TSS/BOD is not to exceed 1.0.

- \*biosolids does not include trash material removed by screens or cyclones in the Cannibal System, or headworks screening or grit removal solids. The quantity of trash material is not a warranted parameter. In the event that the plant has an effluent phosphorus limit, chemicals will need to be added to precipitate and remove phosphorus and extra biosolids will need to be wasted from the plant to remove the chemical phosphorus solids under these conditions, the alternate warranty would apply and "biosolids" would include the chemical-phosphorus solids.
- (b) The Biosolids Production Warranty set forth in Section 1(a) hereof is expressly conditioned upon (i) the Cannibal Process being erected, started up, operated and maintained in accordance with MANUFACTURER's drawings, manuals and instructions, (ii) the influent wastewater for each calendar month of performance testing being within all of the characteristics defined in Appendix I, and (iii) OWNER's maintenance of adequate and accurate records regarding its compliance with each of the foregoing conditions as specified in Appendix V.

### Section 2 - Compliance with Warranty.

(a) If at the conclusion of the Performance Warranty Test Period the biosolids production is



less than or equal to the warranted value set forth in Section 1(a) hereof, MANUFACTURER shall have fulfilled its obligations under this Performance Warranty and OWNER shall so confirm such fulfillment to MANUFACTURER in writing.

- (b) If during any monthly period of the Performance Warranty Testing Period, any monthly average influent wastewater characteristic is above the limits specified in Appendix I, then he biosolids yield guarantee may be increased accordingly.
- (c) If the plant experiences a process upset or mechanical problem beyond the MANUFACTURER's control or if the MANUFACTURER's operational instructions are not followed and such upsets or disturbances are the cause of a wasting event, then that quantity of waste biological solids will not be counted toward the annual biosolids yield.

### Section 3 - Non-Compliance with Warranty.

(a) Subject to compliance with the conditions set forth at Section 1(b) and the fulfillment by the parties of their respective obligations under this Performance Warranty, if at the conclusion of the Performance Warranty Testing Period the biosolids production does <u>not</u> meet the warranted value established in Section 1(a), the OWNER shall issue in writing to MANUFACTURER a Notice of Non-Compliance. Upon issuance of Notice of Non-Compliance, MANUFACTURER will provide a written performance evaluation of the Cannibal System, and may recommend operational changes to obtain compliance, upon which the OWNER shall at its expense initiate said operational changes within a reasonable period of time. If installation of additional equipment, or modifications to equipment, are required, then MANUFACTURER shall at its expense initiate said equipment changes within a reasonable period of time. MANUFACTURER shall also reimburse to OWNER a penalty, as outlined in the penalty table included herein

After implementation of any required operational changes or addition/modification of equipment, a second Performance Warranty Testing Period shall commence and be conducted in accordance with this Performance Warranty. If at the conclusion of the second Performance Warranty Test Period the biosolids production is less than or equal to the warranted value set forth in Section 1(a) hereof, MANUFACTURER shall have fulfilled its obligations under this Performance Warranty and OWNER shall so confirm such fulfillment to MANUFACTURER in writing.

(b) Subject to compliance with the conditions set forth at Section 1(b) and the fulfillment by the parties of their respective obligations under this Performance Warranty, if the Cannibal System has still not reached warranted performance at the conclusion of the second Performance Warranty Testing Period, and MANUFACTURER's obligations under this Performance Warranty have not otherwise been deemed satisfied pursuant to the terms hereof, the OWNER may declare MANUFACTURER to be in breach of this Performance Warranty by notifying MANUFACTURER promptly in writing of such breach. Upon receipt of such notification, MANUFACTURER shall pay to OWNER a penalty payment based on the second Performance Warranty Testing Period average biosolids yield per the schedule below:

### **Excess Biosolids Penalty Table**

	Tissher Tank Ta Tiby Tank In St Live to Tan Tiby Star			
Residents.	edinadioins Litting			ingelika.
0.10	0.28	NA	NA	NA
0.15	0.33	\$30,358	\$89,711	\$180,784
0.20	0.38	\$60,716	\$179,422	<b>\$</b> 361,569
0.25	0.43	\$91,073	\$269,133	\$542,353
0.30	0.48	\$121,431	\$358,845	\$723,138

Note: The alternate biosolids yield would apply if chemicals are used to meet a phosphorus limit

in which case biosolids would include chemical-phosphorus solids. See Appendix IV for a
summary of the penalty calculations.

(c) If at any time during the warranty period, MANUFACTURER personnel make a site visit as a follow-up to notices of non-compliance, and finds that written operational instructions given previously were not followed and are the cause of continued non-compliance, MANUFACTURER can invoice the OWNER for travel and living costs incurred at MANUFACTURER's then-current standard per diem field service rate.

It is expressly understood and agreed by the OWNER and MANUFACTURER that at all times during the Performance Warranty Testing Program and during the installation of additional equipment or other improvements to the OWNER'S facilities, the OWNER must maintain a wastewater meeting the effluent wastewater discharge requirements as specified herein. It is further agreed that all recommendations for operational changes, or for the provision and installation of additional equipment or for other improvements of the OWNER'S facilities shall consider effluent quality to be foremost in evaluation of the procedures and methods to implement these recommendations.

### Section 4 - Schedule and Testing.

The Process Performance Warranty Testing Program shall begin once the Cannibal Process has reached steady operation, and not more than 6 months from the date of Beneficial Use for the Cannibal Process, or more than 18 months following shipment of the equipment, whichever is sooner. Testing to determine fulfillment of this Performance Warranty shall be in accordance with the testing procedures set forth in Appendix II. All testing costs to monitor compliance and for process control shall be borne by the OWNER. This test data, along with documentation required under Section 1(b), shall be made available to MANUFACTURER on request; failure to make such information and data available within a reasonable period shall mullify the Performance Warranty. If the OWNER fails to commence, and diligently pursue, such testing procedures within the time periods established in Appendix II, the Performance Warranty shall be deemed to have been fulfilled and MANUFACTURER shall have no further liability to the OWNER hereunder.

### Section 5 - CERTAIN LIMITATIONS

- PAYMENT OF THE LIQUIDATED DAMAGES PURSUANT TO SECTION 3(b), AND FULFILLMENT BY MANUFACTURER OF ITS OBLIGATIONS UNDER SECTION 3(1), SHALL BE THE OWNER'S SOLE AND EXCLUSIVE REMEDY FOR ANY FAILURE BY MANUFACTURER TO SATISFY ANY REQUIREMENT OF THIS PERFORMANCE WARRANTY. EXCEPT FOR SUCH OBLIGATIONS, IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR ANY DAMAGES OF ANY NATURE WHATSOEVER FOR ANY BREACH OF THIS PERFORMANCE WARRANTY, INCLUDING WITHOUT LIMITATION ANY DIRECT, INDIRECT, CONSEQUENTIAL, INCIDENTAL, SPECIAL. PUNITIVE OR OTHER DAMAGES. MANUFACTURER'S TOTAL LIABILITY UNDER THIS PERFORMANCE WARRANTY, WHEN ADDED TO ALL LIABILITY OF MANUFACTURER TO [PURCHASER] UNDER THE [EQUIPMENT SALE CONTRACT], INCLUDING WITHOUT LIMITATION ANY LIABILITY FOR MECHANICAL WARRANTY CLAIMS OR FOR ANY BREACH OR FAILURE TO PERFORM UNDER THE JEQUIPMENT SALE CONTRACT], SHALL NOT EXCEED THE LIABILITY LIMITATION SET FORTHIN ] OF THE [EQUIPMENT SALE CONTRACT]. THE FOREGOING LIMITATIONS APPLY REGARDLESS OF WHETHER THE LIABILITIES OR DAMAGES ARISE OR ARE ALLEGED TO ARISE UNDER CONTRACT, TORT, STRICT LIABILITY OR ANY OTHER THEORY.
- (b) THIS PERFORMANCE WARRANTY IS MANUFACTURER'S SOLE AND EXCLUSIVE WARRANTY IN CONNECTION WITH THE PERFORMANCE OF THE CANNIBAL PROCESS. MANUFACTURER MAKES NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTIBILITY OR FITNESS FOR PURPOSE.

OWNER:	MANUFACTURER: Envirex Inc	
By: William Co	Name	;
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<u>Ldi5/07</u>	Mart 18, 2005	

# APPENDIX I Influent Conditions

### Influent Wastewater Characteristics

Tithdela Wastewater Characteristics
Warrany
Parameters Parameters
Average Annual Conditions
Monthly Flow, mgd
Total BOD <sub>5</sub> , mg/l. 250
TSS, mg/l
VSS, mg/1
- · · · · · · · · · · · · · · · · · · ·
TKN, mg/1
NH <sub>3</sub> -N, mg/1
Total P, mg/l
Alkalinity, mg/l350
pH, standard units
Sufficient alkalinity is either present, or will be supplied by others, for complete nitrification.
Maximum Sulfate as SO <sub>4</sub> , mg/1
Maximum Freon-Solubles(FOG), mg/1
Inhibitory Matter and Heavy Metals Wastewater shall be biologically treatable and is not toxic or inhibitory to biological treatment. Concentrations not to exceed threshold limits as defined on page 227 of WPCF Manual of Practice No. 8, 1977 Edition (See Appendix III).

# APPENDIX II Performance Warranty Testing Procedures

- 1. Testing Methodology and Sample Analysis.
- (a) All sampling and laboratory analysis methods and principles to be used for verification of any of the requirements of the Performance Warranty shall conform with the provisions of the most recent edition of "Standard Methods For The Examination of Water and Wastewater" (Standard Methods). Should situations develop warranting a necessary modification of any procedure in Standard Methods, the OWNER and MANUFACTURER may approve such modification upon express written consent of both parties.
- (b) (i) The OWNER shall provide evidence that its laboratory equipment and analyst capability meet the standards of precision and accuracy as stated in Standard Methods for each procedure. Federal EPA standard samples may be used to confirm compliance with those standards of precision and accuracy. The OWNER, with mutual agreement of MANUFACTURER, may substitute a state-certified commercial laboratory for analyzing all or part of the samples collected during any tests. The OWNER may also simultaneously analyze the samples as a back-up and/or check against analysis error. In the event a conflict of data develops, the data from the OWNER'S laboratory shall override any commercial laboratory data as to accuracy and/or reliability, given that justification for so doing is based upon sound laboratory evidence.
- (ii) OWNER shall provide MANUFACTURER with reasonable written notice in advance of initiating Performance Warranty Testing and MANUFACTURER shall be permitted to witness and/or participate in the analysis of any and all samples collected during such tests, and to independently collect and analyze additional samples. All data from the analyses shall be provided to the OWNER and shall be included in a performance analysis report to be furnished by MANUFACTURER to OWNER within 30 days of completion of a Performance Warranty Test Period.
- (iii) OWNER shall notify MANUFACTURER in writing at least one week prior to any biological solids wasting (a "wasting event") from the Facility and allow MANUFACTURER to be present to witness the wasting event and to participate in the sampling and analysis of the wasted biological solids. The OWNER shall complete and provide a copy to the MANUFACTURE a "Certificate of Biological Solids Wasting" within 30 days after the wasting event.
- (c) The costs of sampling and laboratory analysis shall be borne by the OWNER. This shall include testing to closely monitor and troubleshoot the Cannibal Process performance and is not limited to testing only for the OWNER's NPDES reporting purposes.
- (d) The Cannibal System, and the Facility, shall be operated by the OWNER and at its expense at all times during the Performance Warranty Testing Program.

### 2. Performance Warranty Testing Program.

The Performance Warranty Testing shall be conducted over a period of twelve consecutive (except as set forth in Paragraph 7(b) below) thirty-day monthly testing periods (the "Performance Warranty Test Period"). Each monthly testing period will require the collection and laboratory analysis of not less than twelve (12) nor more than twenty (20) pairs (not necessarily consecutive) of influent and effluent samples as specified below.

Each of the influent and effluent samples shall be analyzed for pH, Total BOD<sub>5</sub>, Total Suspended Solids and TKN concentrations. Sulfate and Freon-soluble Fats, Oils and Greases shall be analyzed once at the start of the testing and again, only, if USFilter Envirex determines the measurement to be necessary. If toxicity/inhibition is suspected, influent will be analyzed for phenols, cyanide and those heavy metals identified in Appendix III.

Any biological solids removed from the process through a control wasting event shall be analyzed for Total Suspended Solids from not less than twelve (12) independent samples collected at various times during the wasting event. The volume of wasted solids shall also be measured and documented

In the event certain data appear spurious and/or invalid, this data may be rejected upon mutual written agreement between the OWNER and MANUFACTURER. If the rejected data includes an influent or an effluent value for Total BOD<sub>5</sub>, Total Suspended Solids, and TKN Concentration, then all data for the influent and the effluent for that day shall be rejected and that pair shall not be included.

### 3. Sample Collection

Excepting solely for the Freon-solubles and Sulfides tests (addressed in paragraph 5 below), sampling equipment should be used which assures automatic 24-hour collection, with continuous flow and/or no periods of in-line liquid stagnation between flow intervals. The sampling lines shall be cleaned with bleach solution and thoroughly flushed with potable water before any tests and at not less than seven (7) day intervals during the performance tests.

If automatic sampling equipment is not available or malfunction occurs during testing, a manual program of grab samples at 2-hour intervals may be substituted until the equipment is available or repaired; provided that only suitably trained operators may be used by OWNER for the manual collection of grab samples.

### Sample Preservation

The sample collection containers shall be maintained by OWNER at a temperature of 4 deg. C/39 deg. F to preserve the samples prior to laboratory analysis. Analysis for all parameters except Heavy Metals must be initiated within 8 hours of the 24-hour collection period. A 25 percent portion of all influent samples shall be retained by OWNER for up to thirty (30) days for possible

Heavy Metals analysis with preservatives added as recommended in Standard Methods.

### 5. Wastewater Analysis

Total BOD<sub>5</sub>, Total Suspended Solids, and TKN shall be determined on the freshly-mixed composite samples. Sulfate shall be determined in filtrate from the suspended solids determination and/or from filtrate obtained with larger filter pads of the same specifications recommended in Standard Methods for suspended solids. Fat, oil, and grease (Freon-soluble) shall be determined on separate individual samples obtained manually in glass bottles as specified in Standard Methods. A single grab sample should be taken for each analysis. Sulfide shall be determined on grab samples after fixatives have been added as specified in Standard Methods.

pH measurement and BOD<sub>5</sub> shall be at a fixed temperature. Samples shall be allowed to reach 20° C before measurement or dilution steps are performed.

### 6. Flow and Temperature Measurement

Flow measuring devices and meters installed for full-scale service shall have been electrically calibrated by the supplier and the accuracy attested to in writing to the OWNER.

In an attempt to test the process at design conditions, alternate means of flow proportionment through the Cannibal Process shall be devised to a mutually satisfactory agreement between the OWNER and MANUFACTURER.

Temperature of the influent shall be obtained with a metallic dial thermometer continuously submerged in the liquid. This thermometer shall be calibrated before tests begin against a mercury filled glass thermometer and at weekly intervals during the Performance Warranty Testing Period.

### 7. Performance Test Suspension and Resumption

(a) Adverse circumstances may develop beyond the control of the OWNER that interfere with the continuation of a Performance Warranty Test Program after the program has begun. In this event, if corrective measures cannot be implemented within 48 hours, the OWNER shall notify MANUFACTURER of the necessary suspension of the program. Any samples under analysis associated with the upset condition shall be disallowed from later performance calculations for the Performance Warranty Testing Period.

When conditions and circumstances have returned to normal, a suspended test may be resumed following notification of MANUFACTURER that the treatment system has again stabilized.

(b) The length of the Performance Warranty Testing Period shall be reduced, (i) if the condition set forth at Section 1(b)(ii) of the Performance Warranty is not satisfied, and/or (ii) the performance testing cannot be conducted due to circumstances not attributable to the breach by MANUFACTURER of its obligations bereunder. As an example, if compliant influent cannot be supplied for three months during the Performance Warranty Testing Program, the Performance

Warranty Testing Period shall be nine thirty-day monthly periods. The Performance Warranty Testing Period shall be extended, day for day, for each day that performance testing cannot be conducted due to circumstances attributable to the breach by MANUFACTURER of its obligations hereunder.

### APPENDIX III

From WPCF Manual of Practice No. 8
1977 Edition, Page 227
TABLE 14-III. Threshold Concentrations
of Pollutants Inhibitory to the
Activated Sludge Process

	Concentration	on (mg/l)	
POLLUTANT	Carbonaceous Removal	Nitrification	
Aluminum	15 to 26		
Ammonia	480	-	
Arsenic	0.1	-	
Borate (Boron)	0.05 to 100	-	
Cadmium	10 to 100	_	
Calcium	2500	_	
Chromium (bexavalent)	1 to 10	0.25	
Chromium (trivalent)	50	_	
Соррех	1.0	0.005 to 0.5	
Cyanide	0.1 to 5	0.34	
Iron	1000	_	
Lead	0.1	0.5	
Manganese	10	_	
Magnesium	_+	50	
Mercury	0.1 to 5.0	-	
Nickel	1.0 to 2.5	0.25	
Silver	5	-	
Sulfate	-	500	
Zinc	0.08 to 10	0.08 to 0.5	
Phenols: Phenol Cresol 2-4 Dinitrophenol	200  	4 to 10 4 to 16 150	
*Insufficient Data.			

# APPENDIX IV

## Penalty Calculations

The following table summarizes the values and methodology used for calculating the warranty penalties:

A. Design Criteria		
1. Design Flow	16	
2. Flow (est. during warranty period)	9	MGD
3. Flow (total annual during warranty)	3285	MGYr
4. Influent BOD concentration	250	mg/L
BOD Load (annual during warranty)     Conventional Yield following	6,849,225	
Digester (w/out Cannibal)	0.50	IP\IP
7. Bio-Yield (conv. minus trash)	0.30	lp\p
8. Cannibal Yield at Failure	0.30	lp\lp
9. Guaranteed Yield	0.10	!b/lb
B. Waste Sludge Quantities		
1. Conventional System	3,424,613	lbs/Yr
2. Cannibal System at Failure	2,054,768	lbs/Yr
3. Guarantee	684,923	lbs/Yr
C. Penalty Calculations		
1. Pounds Over Warranty at Failure	1,369,845	lbs/Yr wel
2. Wet Tons Over Warranty at Failure	2,854	tons/Yr per wet
Anticipated Disposal Cost	\$ 42.55	ton
4. Anticipated % solids		24.00%
5. Execess Annual Disposal Costs at Fallure	\$ 121,431	
<ol> <li>Projected Annual Savings (during warranty period)         Note: savings base on sludge disposal only     </li> </ol>	\$ 261,959	per year
7. Equipment Cost	\$ 1,560,000	
8. Payback Period	6.0	years
9. Maximum Total Penalty Cost	\$ 723,138	
10. Maximum Total Penalty after First		
3 Years	\$ 358,845	

### D. Penalty Table

Actual		Annual Penalty	Penalty after		Total
	(first three		three	]	
Bio-Yield	years)		years	Penalty	
0.10	\$	<del>-</del> .	\$ -	\$	-
0.15	\$	30,358	\$ 89,711	5	180,784
0.20	\$	60,716	\$ 179,422	\$	361,569
0.25	\$	91,073	\$ 269,133	\$	542,353
0.30	5	121,431	\$ 358,845	\$	723,138